PHI DELTA KAPPAN

A Journal for the Promotion of Research, Service, and Leadership in Education

An Editorial and Two Articles Debating the Church-School Issue

Proposed: A National Curriculum Commission—PAUL R. HANNA

Neglected Educational Research Areas CARROLL · COLADARCI · SMITH

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Democracy Is Not for Children

Tips for Beginning Teachers

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What Is Discrimination?

By MAYNARD BEMIS
Executive Secretary, Phi Delta Kappa

IN a recent pronouncement, the Most Rev. Karl J. Alter, chairman of the Administrative Board of the National Catholic Welfare Conference, emphatically stated: "In the event that a federal aid program is enacted which excludes children in private schools, these children will be victims of discriminating legislation. There will be no alternative but to oppose such discrimination." This is a threat which has been echoed over the last few weeks by others in the Roman Catholic hierarchy and one which presents a major obstacle to favorable action on federal support for public education.

But what is discrimination?

Publicly supported schools are publicly controlled schools, and tax funds raised for their support are administered by public officials responsible to the people. The state determines the minimum professional and academic qualifications required of those eligible to teach. The local board, operating under more or less restrictive mandates laid down by the state constitution and legislature, determines where and when buildings will be constructed, who will be employed and under what conditions, what will be the general nature of the curriculum, and how much all this will cost. No one is suggesting that control of a public service by public officials responsible to the people they represent is discrimination.

But do private schools represent a public service controlled by public officials responsible to the people they represent? Certainly the Roman Catholic hierarchy has not volunteered to accept such public control in return for tax funds publicly raised. To accept the control of a state legislature and a local board of education over its operation would defeat the very purpose for which a private school is established. Is it not discriminatory, however, to allow public funds to be spent by private schools without public control and yet insist on such control for public schools?

Unfortunately, the issue is minimized by the fact that we are at this moment talking about federal tax money. To many people the federal tax dollar is quite impersonal. It's not real in the same sense as is the dollar extracted by the local property tax, or even the rapidly accumulating pennies contributed through a state-enacted sales tax. Nevertheless, tax revenue is public revenue, regardless of the level of government through which it is raised.

If the 87th Congress provides federal tax money for the support (without control) of private schools, the next step will not be long in coming. The reasoning will be simple: Since federal tax money has been granted for the support of private schools, is it not *discrimination* to deny state and local tax funds for private schools (without control)?

The better part of wisdom is to avoid that question *later* by denying the assumption *now*.

The question of tax support for private schools must be faced differently in our country from the approach which might be used in any other. The public school system in the United States is unique. Our founding fathers brought with them their languages, their many religions, their laws, their customs and traditions. But the public school system is our own invention. Most of us agree that it has been the greatest single force in welding together succeeding waves of immigrants and in solidifying regional interests into national purpose. Nevertheless, our government has not seen fit to deny private schools the right to exist nor parents the freedom of choice to send their children to any of the many varieties.

Such voluntary segregation has its use in our pluralistic society. It is one safeguard against deadly conformity. It can be a source of those

new ideas that are the lifeblood of democracy. As Philip Phenix says, "Democracy does not presuppose identity and interchangeability of persons, as in a collectivist society, but rather the orchestration of differences into a rich and harmonious social commonwealth."*

We must preserve a delicate balance between diversity and consensus, a successful "orchestration." The proliferation of private schools, which public tax support would encourage, could upset this balance in favor of divisiveness. It could make more difficult the development of citizens who are understanding and tolerant of differences in religion, race, and social and economic backgrounds. It could spread so thin the available financial resources for the support of education that it might well wreck the public schools. It is to guard against just such dangers that government at any level—local, state, or federal—has a responsibility to protect its own institutions and interests against the centrifugal force which multiplication of splinter groups would develop.

Private schools are established to further some sectarian, class, or other special interest, and it is for this reason that some parents choose to send their children to them. Parents should be free to do this. It is strictly a matter of choice. But the individuals who want to exercise the choice must be willing to bear the cost. Certainly, public officials cannot be accused of *discrimination* for refusing to use tax funds in promoting the interests of any group that chooses not to be satisfied with a public, tax-supported institution, agency, or service and decides to establish its own (free from public control).

* In "Values in the Emerging American Civilization," *Teachers College Record*, April, 1960, p. 362.

Opinion Opposes Aid for Catholic Schools

► U. S. public opinion opposes federal aid to Roman Catholic schools more sharply now than it did a dozen years ago, according to the Gallup poll as reported in *Time* magazine. In 1949, when a House bill for aiding public schools made aid for parochial schools a public issue, Gallup asked: "Should this money go entirely to public schools, or should part of it go to parochial schools?" The results:

Public schools only	49%
Parochial schools in part	41%
No opinion	10%

Gallup's newest question was: "Should this money go only to public schools, or should money go to help Catholic and other private schools as well?" The results (for late March):

Public schools only	57%
Catholic and private as well	36%
No opinion	7%

But the public was more tolerant of federal loans for Catholic school construction. Forty-two per cent approved, versus 46 per cent who opposed and 12 per cent who gave no opinion.

For Pluralism in the University

► Catholic Church officials are demanding direct government subsidies as essential to survival of church-related schools and colleges, but the Church in America is by no means monolithic. Many Catholic laymen, for example, are not convinced of the wisdom of the effort. The January 27 issue of *The Commonweal*, lay Catholic weekly, offers an alternative suggestion, written by Father Garvey of Assumption University, Windsor, Ontario:

"That college 'affiliation' has become an accepted practice in Canada is apparently not widely known in the United States. Yet this idea—the association of several colleges, under differing denominational administrations, to form a single university with commonly shared facilities—is an application of pluralism to the sphere of university education which would seem to hold special interest for educators in the U.S., particularly Catholic educators, who, besides being plagued by financial problems, are presently sensitive to the quantity and quality of the Catholic contribution to the secular world of academic learning.

"My own school, Assumption, received its university charter in 1953, but prior to that time it had been an affiliated college of the University of Western Ontario, which is located in London [120 miles from Windsor]. . . . Assumption remains under the control of the Basilians and now has affiliated with it, under independent sponsorship: Holy Redeemer, A Redemptorist college; Holy Name, a college of the Sisters of the Holy Names of Jesus and Mary; Canterbury, an Anglican college; and Essex, a nondenominational college" established with the encouragement of the provincial government. The pooling and sharing of all facilities both expands the resources available to each college and frees money with which to attract talented scholars and teachers in greater numbers.

The eligibility of Essex to receive provincial grants "is, of course, a great help to the university, since Essex is responsible for costly academic areas such as the sciences, engineering, business administration, and nursing. From government grants, Essex has financed the building of a new library which is operated by the university, and is presently engaged in constructing a building for pure and applied sciences."

Proposed—

A NATIONAL COMMISSION
For Curriculum Research and Development

World War II shuffled Americans like a deck of cards. Ever since, there has been a growing conviction that for true unity the nation needs a better-unified system of schools—one suited to our new mobility and interdependence, more alert to our changing needs, more quickly responsive to the best leadership the country can produce. An articulate spokesman for this conviction is . . .

. . . PAUL R. HANNA

SHOULD we have a nationwide, nongovernmental commission for curriculum research and development to provide continuing leadership in formulating educational objectives and in recommending ways to improve the school curriculum for our national community?

Several outstanding proposals have been made. In the September, 1956, issue of *The Nation's Schools*, Finis Engleman stated that "the schools of our nation need some curriculum experiences in common. . . . Some common values, some common understandings, and some common qualities must bind our people together in these times when factions from within and enemies from without would tear our nation asunder. . . . Curriculums should be designed, therefore, to develop [the] competencies required."

Earlier (May, 1945) Emeritus Professor Thomas Briggs of Teachers College, Columbia, proposed in the NASSP *Bulletin* a "curriculum commission" consisting of a "staff of the ablest . . . men and women of the nation working continuously on a full-time basis."

Within the past year or so the debate has continued. *The Nation's Schools* carried articles and editorial comment. Many journals have reported on a January, 1959, conference on the problem, held at the Center for Advanced Study in the Behavioral Sciences at Stanford. Summer workshops and conferences have furthered the analysis.

We live in a time of great expectations; we are at the same time tormented by the tensions of national and world problems. The promises and the problems have been spelled out by the President's Science Advisory Committee, by the Special Studies Project Committee of the Rockefeller Brothers Fund, by the Educational Policies Commission, by the President's Commission on National Goals, and by many more.

Modern men, using science and technology, have overloaded the ancient culture patterns inherited from our ancestors. These historic patterns are no longer able to carry the modern culture load, for at least two reasons:

1. Each prescientific society, living essentially in isolation from other societies, built an indigenous culture reflecting its conditions and desires. Customs, institutions, laws, and values emerging in each society often differed sharply from those in other societies. When one society extended its trade, influence, or boundaries, strife typically resulted. The strife continued until one or the other conquered or until conflicting customs, institutions, laws, and values had been resolved in a new culture that was indigenous to and therefore compatible with the newly combined and enlarged community.

Modern men live in another such transitional period of human history. Our modern drama takes place, however, on a much vaster stage: The whole planet is involved in a gigantic conflict of cultures.

New cultural patterns are in the making. If we move wisely and courageously, we may transform a world divided by tension and revolution into a world of justice, plenty, peace, order, and freedom.

2. There is a second sense in which ancient culture patterns are inadequate. Our ancestors lived without benefit of modern science and technology. Our forefathers did their work primarily with muscle power moving a few simple tools. Their social, eco-

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nomic, and political institutions, as well as their ethical values, were nicely meshed with their technics of "hunting and fishing," or of "agriculture," or of "mercantilism." The cultural balance between institutions and values on one hand and the technics available in such prescientific societies on the other gave assurance of survival and continuity.

But today's mechanically-powered, automation-directed technics throw the inherited culture patterns off balance. Our social, economic, and political endeavors lag behind achievements in the material and physical aspects of our culture. The resulting cultural imbalance causes much of our trouble.

How shall we as a nation move to restore a dynamic balance? How shall we face a future so difficult and yet so filled with promise for achieving the good life for all men? Shall we leave the future to luck and to chance? Or are there things we can do to assure victory for all mankind?

Certainly part of the solution will be found in an improved school curriculum.

The following proposal is presented with the hope that it may stimulate nationwide discussion:

> *Our desire to perpetuate and advance our cherished national values and institutions requires the creation of a nongovernmental, nationwide commission for curriculum research and development.*

Such a national commission would consciously and continuously contribute to the effectiveness of education in achieving national goals. This proposal is the logical conclusion to a series of considerations which, stated briefly, are:

- A modern view of *change;*
- a modern view of *community;*
- the dual *purposes of education;*
- the soundness of the American theory and practice of assigning *responsibility for curriculum to the local and state communities;* and
- *a nationwide commission* to provide local and state school authorities with comprehensive and alternative curriculum recommendations to help develop the common school content.

Change. The proposal as stated above involves a basic assumption about change. Life for our remote ancestors remained constant from generation to generation. Change was the exception. Permanence was the chief characteristic of man's existence.

But with the coming of enlightenment, the older crust was broken and revolutionary new ideas and events developed. Men gradually came to expect change. During this recent past, three views of change emerged:

1. Change is the result of supernatural forces entirely outside of man's knowledge or will.

2. Change is the result of chance; what happens will be the unpredictable result of actions and interactions that follow no plan, rules, or laws.

3. Change is, within limits, increasingly the result of human knowledge, choice, and action.

The first and second of these views have honorable histories. Implicit in the third, which is accepted by a growing assembly, is the belief that education can make a profound difference in achieving our national goals.

Community. In the proposal we are here considering the national community and the state and local communities are specifically mentioned. Such modifiers as "national," "state," and "local" are widely coupled with the generic term, "community." Actually, we moderns are becoming accustomed to speak of expanding communities that start with the family and extend outward like a series of concentric circles through the neighborhood community, the local community, the county community, the metropolitan community, the state community, the region-of-states community, the national community, the region or association of nations, and finally, at the outer limits, the world.

In the long sweep of human history, effectively organized communities of men larger than the local community have been the exception rather than the rule. Not until means of communication had improved to the point where people living in a larger arena could feel common ties and face and solve problems through united effort did states join with states to form nations; and still more recently nations have joined with other nations successfully in such emerging communities as the North Atlantic Treaty Organization, the Organization of American States, or in the Communist bloc. We have had centuries of time in which to build and consolidate our cultures in our state or lesser-than-state communities. The human race is still building and testing culture patterns for the national or the larger-than-national communities which have so recently been established.

Let us consider the United States for a moment. In the early 1800's, when the system of public schools was being nurtured in this young republic, we were in that stage of expanding community development when the state was struggling to come of age. One hundred and fifty years ago communication was for practical purposes limited to lung-power and letter exchange; therefore most problems were raised and solved in the neighborhood and local community arenas.

Later in the 19th century, communication inventions increasingly brought isolated peoples together in new state communities; the cultural frontiers of that day were the borders of state communities. Our Bill of Rights and federal Constitution naturally made the establishment and control of the school curriculum the responsibility of the state. The state community, in turn, delegated much of this authority to the local community. This United States pattern of local and state responsibility for the school curriculum was then the logical result of two things: the almost exclusive role the local and state com-

munities played in the government in that period of our national history, and our fundamental belief that human ends are served better in most endeavors if the responsibility is widely spread among the people.

But such inventions as the universal news services, the postal system, the telegraph and telephone, radio and television, the automobile, train, and plane, etc., have broken through the older barriers that separated state from state. *Modern communication and transportation have made our national community a magnificent reality.*

Our educational system, formerly geared primarily to the local and state communities, must now be deliberately designed to serve as a cohesive and preserving element in the national community as well. Modern education must prepare our children and youth to function well in each of the concentric circle communities. No one of these expanding communities can be neglected without running the risk of catastrophe caused by ignorance and by conflicts in values.

Dual Purposes of Education. Education has always had two purposes: improvement of the society and development of the individual. The emphasis has shifted from place to place and from time to time. In our national life during the 19th century, public education became a primary instrument to preserve the nation's heritage and to develop the state and national communities.

With the opening of the 20th century, the second goal of education came to the fore. Moral philosophy and educational psychology not only forced the goal of individual development into focus, but almost pushed the community improvement objective off the educational stage. A perusal of almost any current educational journal or professional text demonstrates that the purpose of schooling today is expressed primarily—often exclusively—in terms of developing the individual child.

Can we afford to continue stressing one of these two equally important goals to the neglect of the other? Surely education today must attend simultaneously to both historic purposes: the improvement of society and development of the individual. The sooner these two purposes work in harmony, the better the chance of attaining the promise of tomorrow.

Local and State Responsibility for School Curriculum. The U. S. pattern of local and state control of curriculum was made partly in response to the primitive condition of technology in the early 19th century. But even if at the beginning of the last century advanced technology had made national and international communities of equal importance with local and state, many people would still insist on placing the responsibility for final policy and action in curriculum at the local and state level. Comparative education seems to support the position that democracy is best served if the control of curriculum is placed in the hands of people who are close to the sources of power—the school voters and parents in local and state communities.

It is important that this issue be clearly understood by all. There is no need for changing the existing legislative provision for local and state responsibility for school curriculum, *provided* state and local school leaders can be supplied with the best possible curriculum materials. Final choices in the curriculum should be decentralized and kept in the hands of the people.

Curriculum Designing at Local and State Levels. What has just been said about the desirability of local and state control of curriculum may sound to some as contradictory to the major proposal of this paper. But it is not inconsistent to say that educational objectives formulated by local and state authorities must serve the national community as well.

Let us examine for a moment the shortcomings of our present efforts. The typical local community spends a tiny fraction of its budget on curriculum research and development. By contrast, modern agriculture and industry spend relatively large sums on research, design, and development. The usual school pattern is to assign to a small curriculum staff attached to the central school headquarters the task of stating educational objectives, designing a curriculum, formulating a program of studies, publishing teaching guides, and selecting instructional materials. What shortcomings are inherent in this practice?

First, the range of human knowledge and values is so vast that it requires a high degree of competence to arrange a priority of generalizations for a school curriculum. Where on the staffs of most district or state education departments do we find the scholarship in all the branches of science, mathematics, social sciences, and humanities adequate to the magnitude of the job here suggested?

In the second place, the school curriculum has seriously lagged behind the rapidly expanding frontiers of human knowledge. Research by John D. McAulay[1] of Pennsylvania State University illustrates the point. McAulay studied the geographic strand of the curriculum in the public schools of the United States over a period of twenty years. He found that a decade of time elapsed between acceptance of a new geographic generalization by professional geographers and the introduction of that material into pupils' textbooks. Further, and even more disturbing, he found that two decades elapsed between the acceptance of a geographic principle by the professional geographers and the introduction of that material into the courses of study that guide instruction in this curriculum strand.

Twenty years is a long and costly time lag in a world that leaps rather than crawls into the space age. If the slow rate of school curriculum modernization found in geography from 1928 to 1948 is still representative, children in school today will have graduated from secondary schools and colleges be-

[1] John D. McAulay, "Trends in Elementary School Geography." (Unpublished doctoral dissertation, Stanford University, 1948.)

Who Speaks for Education?

► An article many Phi Delta Kappans will want to read appears in the May, 1961, *Nation's Schools*. Titled "Who Speaks for Education?" and written by Dean Lindley J. Stiles of the University of Wisconsin, it reports on a survey Dean Stiles made recently among opinion leaders. Remarkable agreement prevailed among Stiles' unofficial jury of experts that while many may try, no one speaks for education in America. He confirms a statement by Paul Woodring, editor of the *Saturday Review* Education Supplement, who says, "I doubt that the name of any educator in the nation is known to more than two or three per cent of all Americans. Possibly Conant is an exception."

fore their courses of study have caught up with recent advances in geographic knowledge.

It is true that great efforts at curriculum modernization are currently being made. Textbooks and courses of study improve each year. Few state or local school boards, however, can possibly afford to employ on their curriculum staffs scholars in each of the disciplines of knowledge. It is difficult to imagine Centerville or Middle City employing, full time, fifteen to twenty-five outstanding scholars in mathematics, physics, chemistry, botany, zoology, astronomy, and in all the other branches of the social sciences and humanities. If Centerville and Middle City *could* afford it, and were to employ the cream of the scholars, where would Osceola State Department of Education find enough of this scarce manpower to add to its state curriculum staff? Just to speculate on the difficulty that each of the fifty states and the 50,000 local school districts would have in finding enough scholarly talent to go around, even if they could afford to do so, should demonstrate that it is impossible for each local and state school system to maintain a complete staff of scholars for curriculum research, design, and development. It would also be a duplication of effort that neither this nation nor any other could afford.

AGAIN we ask, how shall we satisfy the national need for an adequate education? How shall we strengthen the school curriculum to assure the common learnings of generalization, value, and competency needed by our national community? The solution here proposed is to create a *national commission for curriculum research and development.*

One must immediately acknowledge that excellent curriculum research and development are under way in many quarters. The Educational Policies Commission from time to time has produced excellent documents on the purposes of education and on the curriculum of the schools. Many educational associations and many *ad hoc* educational groups have also made proposals concerning the common learnings for the nation. The NEA Project on the Instructional Program of the Public Schools plans to issue several publications before ending its work in August, 1962.

During the 19th century, scholars in the humanities, mathematics, the social sciences, and the natural sciences gave much attention to the content of the elementary and secondary school curriculum. During the 20th century, however, the scholars have largely ignored presentation of content from their disciplines in the lower schools. But within the last decade these scholars have been turning again to the problems of elementary and secondary school curriculum. Currently, physical science scholars at the Massachusetts Institute of Technology and mathematicians at several universities are working to improve the high-school program. Several proposals are now in the formative stages: The American Council of Learned Societies proposes a study in economics and the National Science Foundation is studying the biological sciences. These organizations, and others, are hoping to improve the school curriculum.

With a different approach but with a similar motive, laymen are today more active than they have ever been in examining the school curriculum and proposing improvement and reform. The recent White House Conference on Education was a stupendous effort led by the lay segment of the national community to analyze and improve schools. The excellent statements by the Special Studies Project Committee of the Rockefeller Brothers Fund and by the President's Science Advisory Committee are examples of what laymen can do to suggest ways of strengthening the curriculum. The National Citizens Council for Better Schools organized 18,000 local groups working for improved education. The National School Boards Association is deeply concerned with the problem of curriculum. State and local school boards seek to improve those aspects of the curriculum which relate directly to national welfare. The American Textbook Publishers Institute and similar organizations are studying the place that instructional materials should have in the curriculum. And finally, the schoolman has not only a very great interest in the curriculum but an obligation to see that our children are exposed to the very best education.

But in each such effort certain inadequacies exist:

- The body has not been sufficiently broad enough to represent all the partners of the entire national community;
- the body has not had a permanent or even a prolonged existence;
- the body is not in continuous working session;
- the body only occasionally tackles the problem of national welfare and school curriculum; or
- the body concentrates on one strand or discipline of the curriculum at a time and makes little contribution to over-all balance of objectives in the curriculum design.

We need a permanent nationwide commission on curriculum, nongovernmental, widely representative, and continuously at work on educational goals and balanced curriculum design.

We will now examine a series of questions that are asked about such a commission.

What Would a National Commission Do?

We visualize that a national commission for curriculum research and development would continuously:

- Research, formulate, and reformulate the basic purposes of education for our national community in a world setting. Such a set of objectives would help assure the perpetuation and better achievement of the Bill of Rights, the values on which our way of life is built, and the great generalizations in the humanities, social sciences, and sciences drawn from the pages of history.
- Research and formulate alternative curriculum models to provide the teaching-learning experiences through which children would come to understand, appreciate, and have loyalty to our national values, laws, and institutions.
- Research systematically all the expanding horizons of man's mind and spirit and abstract therefrom those values, generalizations, and competencies that are of vital interest to the survival and progress of our national community.
- Interpret these new ideas from all the academic disciplines and make the appropriate ones available to all concerned with curriculum development.
- Emphasize the need to keep in balance the second purpose of education—development of the individual.

There is concern in some quarters that the recommendations of such a national commission could be damaging to discussion in schools of the wide variety of views held by people in a democratic society. There are those who believe schools should discourage any discussion that raises questions concerning historic or popularly accepted positions on controversial issues. But if a closed position were taken by a national commission, the result could be disastrous to a nation that needs to explore every issue and every point of view.

We believe that one of the major contributions of the proposed commission should be the clear identification of the divergent ways of viewing important problems and the encouragement of provisions in the school curriculum for study and discussion of a wide range of views. The job of the national commission would be to encourage and facilitate the creative genius of a democratic society.

Who Should Hold Membership on a National Commission?

As suggested earlier, such a commission should have on its staff outstanding persons from three segments of our national life:

Scholars *Laymen* *Schoolmen*

This trio is a *sine qua non* to this proposal. No curriculum effort will be comprehensive enough to meet the demands of this age unless all three partners—the scholar, the layman, and the schoolman—join efforts.

The *scholars*—persons possessing special knowledge in any branch of learning—must indicate what values and concepts from the past and present seem to them to be most important and then suggest priorities.

These scholars not only study the past and analyze the present, they also scout the future. They must point out the possible directions future change may take, suggest what seem to them to be the best of the alternative directions for change, and point out the pros and cons of each alternative.

The *laymen*—persons not primarily scholars nor members of the schoolmen's profession—have the special responsibility of evaluating the priority lists prepared by the scholars and of indicating those that seem to them to be of greatest significance. In a democratic society, the citizens must finally make this choice. True, the scholars and the schoolmen are also citizens and together the choices are laid out for the curriculum designers at the local and state levels. The laymen, particularly those with school board experience, must be represented on the national commission to assure that the work of this body does not lose touch with the citizens with whom the local and state curriculum decision rests.

The *schoolmen*—persons who teach in or administer schools—must be working members of the trio. They possess the special knowledge of how a curriculum design may be constructed to take full advantage of the scholar's knowledge and of the layman's choices and at the same time take account of modern insight into child growth and learning motivation. The schoolmen are the curriculum architects and must be working partners in the commission.

Unfortunately, in curriculum research and development to date there has been no such national joint effort of scholar, layman, and schoolman. One unique feature of this proposed national commission is that it will have built into it competent representation from each of these three segments of our society. Such teamwork is necessary for its success.

How Could Continuity for the Commission Be Provided?

The commission should have a permanent endowment or a fund sufficient to assure operation for at least a ten-year period. This endowment might come from several sources: individual or corporate

donors and foundations; lay, scholarly, and professional educational organizations. There are probably other sources of funds.

In order to provide continuity in personnel, it is proposed that the commission have a small permanent staff, headed by an executive secretary. This is the way in which many professional and industrial organizations have solved the continuity problem. To this staff several of America's outstandingly visible scholars, laymen, and schoolmen should be appointed for long terms to serve full-time.

For shorter periods, from two to four years, small supporting groups of scholars (in the humanities, sciences, mathematics, and social sciences), laymen, and schoolmen would be appointed to plan and carry out research projects: to identify educational purposes and to propose alternative curriculum models—all under the general direction of the more permanent staff.

For very brief periods of time (a few weeks to a year), added specialists or generalists could be recruited from among scholars, laymen, and schoolmen to serve as consultants to do specific tasks calling for short and intensive periods of work. On such short-term appointments might be publishers and producers of instructional materials; foundation personnel seeking coordination of their programs; representatives of learned societies planning intensive curriculum work in one discipline; educational association executives planning yearbooks on curriculum; accreditation agency representatives; etc.

Thus continuity of the commission could be assured through a small permanent staff with the authority and resources to surround itself with added personnel as the evolving projects of research and synthesis develop.

What Might Be the Commission's Relationship to Other National Efforts in Curriculum?

A national commission for curriculum research and development is conceived of as a national resource, supplementing and supporting the many efforts now under way or under consideration to improve the school curriculum. Under no circumstances would this proposed commission take over or attempt to direct the well-defined curriculum projects of others. Rather than competing, this proposed commission would try at all times to understand and relate the objectives and procedures of other groups to the total curriculum undertaking. And in turn, other groups or bodies concerned with curriculum should seek in the work of the national commission suggestions and support for the enhancement of their work.

In the membership of the proposed commission there would undoubtedly be individuals familiar with or intimately associated with the more specific curriculum research and development projects of the several departments of the NEA and especially of the Project on the Instructional Program of the Public Schools. Also there should be representation from the National Congress of Parents and Teachers, the American Council of Learned Societies, the National Science Foundation, and so on. Through such overlapping of personnel on the commission and other groups, the efforts of the several bodies working on the segments of the school curriculum could be informally coordinated. Through such collaboration the findings and recommendations of the several bodies could find more complete synthesis in the deliberations of the national commission.

Less cooperative situations are also possible. If any group chooses to ignore the facilities offered by the proposed national commission or to withhold support, the commission would be free to move forward without concurrence. While it is to be hoped that the relations between the commission and others would generally be positive and complementary, in the absence of agreement the commission would take independent action in behalf of its purposes.

What Authority Would a National Commission Have?

Deeply imbedded in the American character is a belief in and emotional commitment to local autonomy in school affairs. At the same time, there is a growing awareness of the chaos in school curriculum resulting from local option. There seems to be a ground swell of support for strengthening the school curriculum as a bulwark of the national community at this time when internal and external forces challenge us.

Some advocate a strong United States Office of Education to provide leadership in curriculum improvement. Congress may assume greater responsibility for curriculum guidance. The federal government for years has played a significant role in vocational education and the new National Defense Education Act takes the government into new curriculum areas.

The possibility that local and state autonomy for school curriculum may be further modified by federal participation disturbs most laymen, scholars, and educators. This possibility causes many to reject the proposal for any kind of a national commission for curriculum. They ask how one can be certain that a national commission will not become the instrument through which citizens and teachers would be denied local or state control of curriculum choices.

It is clear that this basic question must be answered to the satisfaction of the American people and the teaching profession. But if one agrees that we need a strengthening of curriculum to assure the promise of our national community, then ways can be found to achieve it. The national commission here proposed is one such solution that needs wide discussion.

The articles of incorporation of the proposed commission would have to safeguard against the commission's exerting legal control over any local or state educational body. *The commission must be*

advisory. It should not have administrative mechanisms for enforcing its proposals; it must be denied power to interfere with the duly constituted bodies that have the responsibility for our school curriculum.

To answer the question more constructively, the commission would possess such influence as the logic and persuasiveness of its proposals would merit among the individuals and groups that might decide to pay some attention to its research and proposals. The commission's impact would be the result entirely of the quality of its deliberations.

In somewhat the same unofficial manner in which the nongovernmental Council on Medical Education of the American Medical Association or the independent National Safety Council both provide stimulation and leadership in their spheres of interest, so the proposed National Commission for Curriculum Research and Development would stand or fall on the merits of the curriculum proposals it makes over the years.

Recently, O. H. Roberts, Jr., former president of the National School Boards Association, said that no national commission serving voluntarily in this advisory capacity can or will impose its opinions on the traditionally independent local or state school boards. He said further that he believes lay boards feel inadequate in their knowledge and judgment and would welcome the recommendations of a good commission to gain better perspective and understanding on which their decisions could be made.

The above discussion of authority, however, does not solve the basic problem for some observers. They ask, how shall the national community protect its interests against the refusal of the few to include in their curricula appropriate teaching-learning experiences that will contribute the common core of understanding and behavior so crucial to our national survival and progress? Admittedly, the proposed national commisison is not a panacea. There is no guarantee that all or even most schools will take advantage of the commission's work.

If adopted, however, this proposal would result in speeding curriculum advance in most schools across the nation. It would lessen the pressure for federal action at the field level. Is it not wiser to take a positive but voluntary step in the right direction and thereby preserve freedom of local and state choice? We face, one must remember, several alternatives, none of which is wholly satisfactory. The case has been stated clearly by John H. Fischer, formerly superintendent of schools in Baltimore and now dean of Teachers College, Columbia, who recently said:

> There is growing awareness of the need to improve American education, particularly the common core of the curriculum. Three alternatives have been proposed. The first is a federal educational system, which is *wholly unacceptable*. The second is to get along with the present structure and procedures, and this, too, is *inadequate* to meet the needs. The third is to maintain the present educational structure but to get national leadership for guidance in making wise curriculum decisions. This leadership would include (1) study groups to give help on the design and content of the specific strands of the curriculum and on instructional materials and procedures, and (2) a commission to deal with priorities and overriding needs. This third course of action, the establishment of a national curriculum commission, seems *most* likely to succeed.

Who Might Use the Results of the Commission's Work?

One could anticipate that the commission's periodically published educational objectives and its alternative recommendations on means of accomplishment would be a fruitful resource for study by and an inspiration to:

- Local boards of education and their professional staffs who would be completely free to ignore, reject, adapt, or adopt the commission's suggestions.
- Local Parent-Teacher Associations and other interested lay groups (AAUW, League of Women Voters, service clubs, etc.) who seek materials and guidance in their study of the curriculum.
- State boards of education and their professional staffs who, again, would be completely free to take or leave the commission's suggestions.
- State associations of school board members, educational committees of state associations of labor, business, veterans, etc., who desire help in viewing the curriculum comprehensively.
- National lay, scholarly, and educational groups who may wish to see how their particular set of interests fits into the total possibility for curriculum.
- Teacher education groups, accreditation bodies, and institutions interested in evaluating their teacher education programs.

These groups by no means exhaust the list of potential users. The current situation discloses an absence of any continuous study and pronouncement by a body of high national visibility that represents all the partners in the national education enterprise. A vast audience awaits the comprehensive help which such a commission as is here proposed could provide.

How Would Members of a National Commission Be Selected?

There are some who favor the creation of a permanent and nongovernmental national commission on curriculum research and development but suggest that its success would be affected by the composition of the commission. Who would name the members? This is a difficult hurdle. Several ap-

proaches to naming the commission members have been advanced.

Some educators believe the National Education Association should determine the composition of the commission and name its members. This has one major weakness: lay and scholarly groups want equal voice in selecting members to represent them. Just as schoolmen would not be enthusiastic about a national commission named by the scholars alone or by the laymen alone, so these laymen and scholars react to schoolmen making the decisions.

Others would have potential donors of funds name the commission members. But there is always question of the ability of donors sufficiently to divest themselves of self-interest to make an acceptable decision on this crucial matter.

Others favor an *ad hoc* group to draw up the plans for selecting commission members. This *ad hoc* group might consist of the executive secretaries of such organizations as the American Association for the Advancement of Science, the National Council of Learned Societies, the National Education Association, and the National School Boards Association.

This small group of executives could easily get together to lay down the principles of commission composition, decide on the best means of selecting the initial staff, and suggest the mechanism for filling subsequent vacancies. Once these matters had been agreed upon, their recommendations could be referred to the several interested organizations and to potential donors for study and action.

In summary, let us return to the series of considerations with which this paper opened. It is contended that:

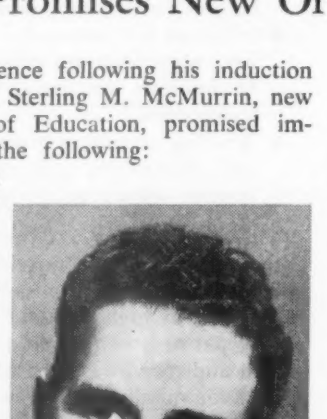
- Because we live in a dynamic era of profound change which we believe we can, with widening limits, shape to our desire and will;
- because the local and the state educational authorities are now and should remain in final control of curriculum choices and programs;
- because modern science and technology have united local and state communities in a great national community, the preservation and improvement of which makes certain demands on school curriculum;
- because few if any local or state systems of education can attract or can afford the rare talent required continuously to study and to propose priority of objectives and alternative curriculum designs that will specifically serve the national interests; and
- because the national community has no recognized and comprehensive body responsible for continuous study of educational objectives and for making the curriculum recommendations necessary to our continuing national progress;

Therefore, it follows that we should engage in nationwide discussion of how best to accomplish the desired curriculum improvements.

McMurrin Promises New Office of Education Emphasis

► At a news conference following his induction into office on April 4, Sterling M. McMurrin, new U. S. Commissioner of Education, promised immediate emphasis on the following:

1. Vigorous support of the administration's proposals in education.
2. Encouragement of quality and rigor in teaching and in what is taught.
3. A comprehensive study of federal programs affecting education at all levels.
4. Issuance of findings and recommendations on educational policy wherever and whenever they are justified by competent research leading to informed judgment.



McMURRIN

5. An intensified study of education in the new nations of Africa with the intention of offering them every possible assistance; the establishment of mutually beneficial educational relations with the nations of Latin America; and the early completion of studies of education in Asian countries.
6. A more intensive development of the Office of Education as a national forum for the cultivation of ideas on education by outstanding minds from all disciplines, academic and non-academic.
7. The strengthening of Office of Education relations with state departments of education and institutions of higher education, as well as its relations with other federal agencies.
8. Strengthening of the Office of Education as a research center, and, through the use of automatic data-processing, as a dissemination center for accurate, up-to-date information on education.
9. A clear definition of the mission and organization of the Office of Education, employing the report of a committee established by McMurrin's immediate predecessor, Dr. Lawrence G. Derthick.

Neglected Areas

In Educational Research

Research workers have been unable to mobilize the resources and talent necessary to provide satisfactory or complete answers to many persistent and fundamental educational problems, which Mr. Carroll identifies. One reason the answers are missing is that researchers are making what Carroll calls "regressive maneuvers" in their contacts with these problems.

By JOHN B. CARROLL

FOR the past year, at the request of James B. Conant, I have been engaged in surveying the field of educational research in a special way. Instead of simply trying to summarize what educational psychology and educational research have accomplished, I started out with a series of questions about educational policies and practices which I have tried to answer on the basis of research results. The questions I asked were suggested partly by Mr. Conant himself, and partly by my own precognitions as to fundamental issues in the study of school learning processes. What most of these questions have been will, I believe, become evident as you read.

My success in answering the questions I have posed has been far from ideal. To be sure, I have confirmed what we all know—that there are a number of issues and questions to which we can give definite and useful answers. We know a good deal about how to measure mental abilities, scholastic achievements, and certain aspects of interest, attitude, and even personality. We can describe the course of the child's physical, mental, and emotional development and we can give a reasonably satisfactory account of the nature, course, and conditions of learning. We can point to research answers to a good number of specific questions about how we should teach reading, spelling, arithmetic, and other school subjects.

But having mentioned these and a few other topics, we just about reach the limits of our knowledge. Currently available techniques and findings, however valuable they may be for many purposes, do not in my opinion constitute a truly adequate scientific basis for formulating educational policy or for improving the practice of education. In fact, it seems to me that educational psychology has failed to provide sufficient knowledge about some of the central problems in school learning, and I intend to indicate what I believe these problems are. You will see that what I call "neglected areas" in educational research cannot be described as "off-beat" or highly original topics which nobody appears to have thought of, but problems so persistent and fundamental that everybody is at least subconsciously aware of them.

Then why have they been neglected? They have not been completely neglected, of course; there have been numerous studies which could be called relevant to these areas. I call them neglected chiefly because educational research workers have thus far not been able to mobilize the resources and talent required to provide satisfactorily complete answers. But they can also be called "neglected" because certain habits of thinking and research procedure have deflected investigators from making direct assaults on them.

Ideally, educational psychology ought to result in statements about what effects various teaching procedures and other actions would have upon the kinds of student behaviors we do or do

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not desire as outcomes of education. To be complete, they need to have built into them any relevant qualifications concerning the characteristics of students, the antecedent conditions under which the statements have validity, and so forth. Since education is a life-long process, our statements ought to refer to the expected course of events over time periods of respectable length.

The neglected problems I shall speak about require statements of this general kind for their solution. It is exceedingly hard to find such statements in research literature.

Regressive Maneuvers, Not Experiments

One reason it is hard to find them is the fact that educational research workers have been prone to make what might be called "regressive maneuvers" in their contacts with these problems. The establishment of a scientific statement of the kind I have mentioned requires the execution of investigations which are true *experiments*. That is, one must set up an adequate experimental design and arrange for a series of experimental treatments or manipulations. The first regressive maneuver occurs when the investigator decides to do not an experimental study but a correlational study —an after-the-fact description of the results of treatments over which one has no real control.[1] For example, we have recently had a rash of *post hoc* studies purporting to show the "effects" of certain high-school courses on college grades; we cannot tell to what extent the effects are actually due to sampling biases. Perhaps the regressive maneuver which takes one from an experimental study to a correlational study is not seriously wrong, for with proper statistical controls one can often derive useful information from correlational studies of effects, and indeed there are some problems that can probably be studied only in this way.

The next regressive maneuver is more serious —the decision to concentrate simply on methods of measuring phenomena. Measurement studies are indeed needed, but even at this level there is another possible regressive maneuver—the decision to study phenomena by indirect methods of measurement rather than more direct ones. Examples of regressive strategies in research are the use of supervisors' ratings of teaching effectiveness rather than indices of student gain and the use of questionnaires and self-inventories rather than observations of behavior. The final regressive strategy—and a most honored one—is to abandon any attempt to deal with empirical data and retreat into the cloisters which harbor those who concern themselves exclusively with methodological problems—with statistical theory, computational techniques, or mathematical rationales.

Please understand that I do not intend to disparage the activities to which there is regression. I have spent long, happy, and (I believe) productive periods in the methodological cloisters. I am disparaging the fact that the maneuvering in educational research is chiefly *re*gressive rather than *pro*gressive. There has been too much retreat to measurement and methodological studies without a corresponding sign of progression to the kinds of descriptive and experimental studies which are at the real cutting edge of our science. Our journals are full of measurement and methodological studies; it can hardly be said that they are cluttered with reports of experimental studies. I suspect that we have come to honor methodological rigor and finesse more than we honor substantiality and relevance of results. Most of our progress has been in developing ways of measuring phenomena and treating data.

Investigators also have certain bad habits which have caused their research studies to be inadequately executed and reported, and interpretable with difficulty. One of these is the failure to specify in tangible terms the actual referents of results of educational and psychological measurements. Instead of attempting to state these meanings in something approaching absolute terms, we resort to the use of relative terms. We report percentiles rather than behavior. We report central tendencies without describing the corresponding points on the statistical continuum. The habit of using arbitrary, relative scales of measurement is so ingrained that one can actually find studies which fail to indicate which end of a scale is which. I feel that measurement people have been neglectful in the fact that they fail to indicate what scores really mean in terms of amounts of knowledge or levels of skill attained. Even in the case of personality and interest tests it should be possible to make an approximate translation of test scores into the kinds of behavior they signify.

Incomplete Reports

The investigator who reports results even in relative terms on an arbitrary scale is not as delinquent as the investigator who fails to report central tendencies at all. There is an all-too-frequent practice of reporting coefficients of correlation, for example, without at the same time reporting the univariate statistics for the distribu-

[1] It is of interest to note that in the first twenty-eight volumes of the *Journal of Experimental Education*, only approximately 20 per cent of the articles can properly be considered reports of *experimental* studies, and there was no perceptible trend towards an increasing proportion of such studies.

tions of the underlying variables. One has no way of appraising the general level of phenomena observed, or of assessing the possibilities of restriction of range.

I COULD not have identified neglected areas if I had not started with a certain field of inquiry. My field of inquiry was defined in terms of a conceptual model of the school learning process. The model states, in quasi-mathematical terms, that for a given individual and a given educational objective or task, the amount of learning is a function of the individual's basic aptitude for learning the task (defined in terms of the amount of time he will require to achieve a specified criterion of performance), his willingness to engage actively in learning for the amount of time necessary to achieve the criterion of performance, the quality of the instruction given him, his ability to understand this instruction, and the amount of time he is allowed to have for learning. This model, I believe, covers the learning of knowledges, skills, and understandings—which constitute a large part of the educational objectives we hold to be desirable—and it can be adapted to cover the learning of attitudes and other behaviors which cannot precisely be conceptualized as performances. And we can give the model a time dimension which allows us to study remote outcomes of learning such as retention and transfer. Presumably, if we knew how the various parts of the model interact—and if we knew what parameters and conditions apply to this model—we would have a large part of the knowledge we need to guide the course of learning in our schools or anywhere else that learning occurs.

An examination of this model and a survey of what light is shed upon it by educational and psychological research has brought me to at least five major neglected areas.

First, I find that we know little about the relation between *learning rates* and *aptitude*. This problem will be more familiar to you, perhaps, if I speak of it as that of the effect of practice or training on individual differences, or as the problem of the relation between intelligence and learning ability. Call it what you will, it is at the root of many issues of educational policy. The propriety and wisdom of any form of ability grouping or individualization of instruction depends partly upon whether in fact there are substantial differences in learning rates and whether these differences are a function of measurable characteristics of the learner such as his "aptitude," or his previous learning experiences.

The problem involves more than a mere observed relation. What is needed is more information than we now have about the *maximal* learning rates for individuals of given aptitude levels, given *optimal* conditions for learning. Obtaining such information implies a vigorous search for optimal learning conditions in school learning, and thus an extensive series of experimental studies on methods of instruction. There are several possible definitions of "optimal" conditions: they could be "optimal" in the sense of yielding maximal learning rates, or in the sense of yielding maximal retention and transfer, or in the sense of yielding greatest satisfaction and confidence on the part of the learner.

No General Statements Possible

As matters stand now, we cannot begin to make general statements about this problem. For example, we cannot satisfactorily account for the fact that (as Anderson, Roff, and others have apparently demonstrated[2]) there is a zero correlation between mental age status of a child and the amount of mental age he will gain in the ensuing year. Does this mean that intelligence has nothing to do with learning rates? Does it mean that children of low IQ can learn just as fast as those of higher IQ? Will this be true regardless of the type of learning that is involved? To what extent can measured abilities—for example, those on the Thurstone Primary Mental Abilities Test—be modified by appropriate training, and at what rate can such changes take place? Are learning rates correlated with the asymptotes (if any) of the learning curve? Questions such as these have not been completely neglected, to be sure; Herbert Woodrow[3] and J. W. Tilton[4] have worked on them, and more recently, Harold Holloway[5] did a small study on the trainability of "primary mental abilities." While they were at Educational Testing Service, Robert Stake[6] and Roger Allison[7] did factorial studies of learning parameters in relation to measured aptitudes. The "coaching" studies supported by the College En-

[2] John E. Anderson, "The Prediction of Terminal Intelligence from Infant and Preschool Tests," *39th Yearbook, National Society for the Study of Education*, 1940, Part I, 385-403.
Merrill Roff, "A Statistical Study of Intelligence Test Performance," *Journal of Psychology*, 1941, 11, pp. 371-386.

[3] Herbert Woodrow, "The Relation Between Abilities and Improvement with Practice, "*Journal of Educational Psychology*, 1938, 29, pp. 215-230.

[4] J. W. Tilton, "The Intercorrelations Between Measures of School Learning, *Journal of Psychology*, 1955, 35, pp. 169-179.

[5] Harold D. Holloway, "Effects of Training on the SRA Primary Mental Abilities (Primary) and the WISC," *Child Development*, 1954, 25, pp. 253-263.

[6] Robert E. Stake, *Learning Parameters, Aptitudes, and Achievements*. Princeton, N. J.: Princeton University Psychology Department, June, 1958.

[7] Roger B. Allison, Jr., *Learning Parameters and Human Abilities*. Princeton, N. J.: Educational Testing Service and Princeton University, May, 1960.

trance Examination Board are of some relevance.[8] All these studies, however, can be regarded as only a beginning. We need a broad enough series of investigations to indicate in detail and in depth what rates and courses of learning we may expect for individuals of various measured aptitude levels, for various types of learning, and for various conditions of instruction. We need to determine whether "aptitude level" is just another way of stating "point on a learning curve" or whether it is a way of expressing the slope parameter of the curve. We need to determine these things for all the important types of school learning, not just for the kinds of clerical tasks and parlor games that are utilized in many experiments on learning.

What has been said about the need to study learning rates in relation to aptitude levels applies equally well to the study of outcomes of learning such as retention and transfer. It is exceedingly difficult to find any studies on the amount of retention that can be observed after various amounts of time elapsed from initial school learning. I am speaking here not of short-term retention, as after a summer vacation, but of retention over long periods of time. Perhaps it would be difficult to separate transfer from other learnings and all kinds of "refresher" effects, but even so, we have very little idea, from empirical measurement, about how well students typically retain learnings in arithmetic, social studies, or foreign languages.

More could be said about this, but I must move on to other areas of neglect.

We Know Little About Motivation

Research has told us little about the role of motivation in school learning. Let us take it for granted, despite the long-standing controversy in the theory of learning, that motivation—in the sense of a willingness on the part of the learner to engage in learning—is indeed a condition of learning. We know little about what actually motivates children to learn, or how to arouse motivation. Research literature reports that motivation as measured by interest tests and questionnaires is rarely related either to aptitude or to school achievement. Our knowledge of the true dynamics of the school learning process is too limited to enable us to account for these low relationships, which on their face seem to contradict the theory of learning. Maslow[9] and others have made a beginning in identifying need systems, but my impression is that these systems are inadequate as yet to explain or to predict how individual pupils approach learning. The study of the motivation of school learning is more than simply the study of systems of rewarding students; the question of what are adequate rewards—and what needs these rewards would presumably fulfill—is too often left open. Studies of both intrinsic and extrinsic motivation are needed.

Research To Improve Instruction

A third large and neglected area in educational research is that of how we can improve the quality of instruction. By this I mean the effectiveness of the procedures which teachers (or textbooks, or workbooks, or laboratory exercises, or teaching machines) employ to communicate knowledge, skill, and understanding to students. One of the virtues and the promises of the recent surge of interest in programed instruction is that at long last it has brought the attention of educational psychologists to the basic issues of how subject matter can be best organized and communicated, how concepts are to be developed and illustrated, and how skills are to be introduced and refined. Gradually a technology of instruction is being forged, but we are in danger of allowing this to occur solely within the context of instruction programed for machines or their close relatives. There is just as much need to develop an instructional technology for teachers, textbooks, films, and other aspects of our total educational enterprise. Only a few psychologists have looked into such questions as what sequences of positive and negative instances of a concept should be presented for optimal concept attainment, or what arrangements of wholes and parts of a complex subject matter are best presented. The didactic principles followed by our teachers and textbook writers are derived more from traditional rhetoric than from modern psychology, and it is at least debatable whether this should be the case.

Another aspect of the need for more information about how to improve the quality of instruction is the study of how empirical laws of learning can be applied in the classroom situation. Let us call this, in fact, a fourth "neglected area" of educational research. I take the position that "learning theory," so-called, is presently concerned with advanced scientific questions relating to the explication of learning phenomena and hence is of little interest to educational psychologists, but that most of the empirical laws of

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[8] R. E. Dear, "The Effects of a Program of Intensive Coaching on SAT Scores, *Research Bulletin RB-58-5*. Princeton, N. J.: Educational Testing Service, 1958.

[9] A. H. Maslow, *Motivation and Personality*. New York: Harper and Brothers, 1954.

learning which are readily applicable in the classroom have already been discovered and well attested. The teacher's problem, therefore, is the organization of teaching procedures in such a way that the full benefits of these empirical laws of learning can be realized. I was surprised to find that the research literature discloses only a handful of studies which explore how principles of learning can be applied in the classroom. For example, we need more studies concerning how we can use the fact that learning is dependent upon the immediate reinforcement of correct responses, or in what situations we can employ the fact that skills may be shaped by gradual incrementing of response standards. There is no point in testing these principles all over again, as some investigators seem to have tried to do, but there is a need to study the feasibility of their application.

Better Teacher Competence Studies Needed

This brings me to a fifth area of neglect in educational research. It is with some trepidation that I claim there has been neglect in the study of teacher competence, in view of the enormous amounts of effort that have been lavished on this field. I nevertheless make this claim, because one can find so very little research on what kinds of behaviors on the part of teachers make for desirable changes in student behavior. I would underline the necessity of using pupil change as a criterion of teacher effectiveness, for after reviewing so many studies which have resorted to the regressive maneuver of utilizing only subjective ratings of teachers I am convinced that we might just as well scrap all such ratings. We find neglect also in the related matter of teacher education—it is virtually impossible to find sound studies of either what changes can be made to occur in student teachers through professional education or of what effects these changes may bring when these teachers enter service. Consideration of what things should be taught to prospective teachers and what actions they should take as teachers sometimes seem to proceed as if educational research never existed.

This sketch of some of the shortcomings of educational research obviously has the limitations of one observer's perspective. You may feel it is distorted. I submit, however, that it is important that periodic assessments of educational research, such as this, be made and widely discussed, to ensure that we are adequately covering the ground and fulfilling the responsibilities we have implicitly taken upon ourselves.

Commentary I

By ARTHUR P. COLADARCI

THE controlling thesis and general strategy presented by Carroll strikes me as relevant, heuristic, and singularly appropriate at this particular period in the history of the education profession—a period marked, for weal or woe, by increased intraprofessional criticism, ready availability of financial sources for research, a high degree of visibility and prestige accorded to educational research, and a patent increase in research activities in education. To be sure, one may find ample room for argument in the identification of particular research areas and problems as "neglected" and, given Carroll's caliber, it is highly likely that such arguments would be highly welcomed by him at the present time. The salient point of interest for me, however, is not the specific diagnoses of neglect but, rather, the rationale and search pattern for identifying the proper objects of research activity.

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I interpret Carroll as emphasizing that a coherent map of the domain of the teaching task is a necessary condition for increasing the effectiveness and relevance of educational research. While such admonitions have been offered previously, only a few individuals have attempted to delineate such a map and even fewer have had the temerity to illustrate its consequences in research behavior. Thus, Carroll's conceptual model of the school-learning process is noteworthy, if not exemplary, and he is to be commended for showing us how his general conceptual model invites a different analysis and re-directs activity. Nor should we overlook the fact that models such as this, *pari passu,* illuminate the ethically neutral functions of educational research and the supremacy of the experimental paradigm in assessing the consequences of educational procedures.

While I have no quarrel with the substance of Carroll's paper, I am inclined to offer a defense for the research activities which Carroll labels "regressive maneuvers." For instance, it is difficult to gainsay

that meaningful identification of variables and testing of hypotheses are frequently precluded because of difficulties with instrumentation and design—including the availability of persons with the appropriate training. Turner and Fattu, after a comprehensive survey of educational research literature, offered the opinion that "seventy years of research on teacher effectiveness have not added much to our systematic knowledge, and it is difficult to see how another seventy can do any more if the same procedures are followed."[1] And one can assume that it was *methodological* inadequacy that led Lamke to preface a recent issue of the *Review of Educational Research* in the following way:

> If the research during the last three years were to be wiped out in the fields of medicine, agriculture, physics, or chemistry, our lives would be materially changed. If research in the area of teacher personnel during the last three years should vanish, education and educators would continue much as usual. There are relatively few studies among the some 500 reported here which will, or should, widely affect educational practice.[2]

More to the point, however, is a possibility that Carroll's suggested strategy may itself provide the needed rationale for that educational research activity that now occurs in naive and non-profitable form —i.e., "regressive" activity. The point can perhaps be made best by initially considering the domain of educational research activity as falling into five categories: (a) description of particular situations, the conclusions of which are relevant only to the situation in which the data were collected; (b) constructing and elaborating psychometrics and research design; (c) relating concurrent events to each other ("correlational studies"); (d) relating events to antecedents in time (prediction); (e) controlling events by manipulating variables to which they are fundamentally related (control).

Carroll is in effect asking for less attention to categories (a), (b), and (c), which have been high-activity categories, and more emphasis on categories (d) and (e), which clearly have been low-activity categories. Although I am inclined to agree, since the latter two categories comprise the "pay-off" activities, I am persuaded that if the first three categories were controlled by the strategy and conceptual model he proposes, they would become not only more meaningful but would even assume a high degree of saliency.

Thus, a description of a particular situation can be a communicable instance of the phenomenon of school learning, if the relevant variables are identified and if the relevant site characteristics are presented. But *relevancy* is not *sui generis*—it is an ingredient added by the observer, and for this task he needs a conceptual framework. The overwhelming majority of such studies thus far have been reported without a conceptual frame of reference; they have been, therefore, uninterpretable or of only accidental value to anyone else. Similarly, correlational studies conducted within a conceptual model that illuminates the relevance of the variables being correlated extends our understanding of the domain of behavior under consideration and suggests hypotheses of greater range.

The conceptual model of the school-learning process offered by Carroll appears to demand, in its implications, increased and improved attention to instrumentation and design. The model itself, for instance, manifestly refers to *interactions* among variables. Given the present status of our knowledge about the study of interactions, it appears to follow *a fortiori* that more effort should be given to the elaboration of the appropriate research designs.

It seems to me that Carroll's commendable temerity in insisting that pupil-gain is the core dependent variable in educational research also necessitates increased attention to methodology. Even if one overlooks the still unresolved reliability problems posed by measures of gain, it appears evident that the gain criterion will be of only limited applicability in educational research until achievement measures have been provided for a range of achievement variables broader than is now available; this means *more* test construction—particularly at the elementary school levels.

In summary, I concur in what I am sure is general agreement with the intent, argument, and analysis presented in the basic paper. It is highly consistent with the emerging wish for "fewer words, more data, and an occasional test of significance."[3] I would, however, emphasize that while many of the activities which he calls "regressive" richly deserve this odium, all of them could make heuristic contributions to the final crucial test of educational methods if they are conducted under the implications of his suggested model and strategy.

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[1] Richard L. Turner and Nicholas A. Fattu, "Skill in Teaching, a Reappraisal of the Concepts and Strategies in Teacher Effectiveness Research," *Bulletin of the School of Education*, Indiana University, May, 1960, p. iii.

[2] Tom A. Lamke, "Introduction," *Review of Educational Research*, No. 3, 25, June, 1955, p. 192.

[3] Eleanor J. Gibson and Vivian Olum, "Experimental Methods of Studying Perception in Children," in Paul Mussen, *Handbook of Research Methods in Child Development*. New York: Wiley, 1960, p. 368.

► "Our century is the first in history when man's insatiable curiosity has yielded him such a potentially lethal harvest of information that he is compelled to add wisdom to knowledge in order to survive. Although knowledge may be in over-production when wisdom cannot keep up with it, the chasm between them has always existed and is only more conspicuous today because it has ominously widened. Folks over three score and ten in age no longer lack the company of the young in living on borrowed time."

—William T. Hutchinson, at the March 17 University of Chicago Convocation

Commentary II

By B. OTHANEL SMITH

WRITING in the first volume of the *Journal of Educational Research,* back in 1920, Lewis M. Terman said in an optimistic mood: "Everywhere tradition is being challenged by experiment. No method or program is sacred enough to escape the inquisitive and ubiquitous pedagogical test or scale —the material with which the school works is subjected to the same cold analysis as the products of the farm, factory, or mine. Nothing is taken for granted; everything must be proved. The spirit of educational research rules the day."

Seven years later, Guy M. Whipple, speaking before the California Education Research Association, could say: "I cannot evade the conviction that, relatively speaking, the published records in education are, on the whole, inferior in quality, and more especially inferior in ultimate significance, to the published records in other branches of scientific endeavor. Too many contributions seem essentially futile. After you read them you feel like saying: 'Well, suppose it is true: What of it?' "

All of this was over thirty years ago. Where do we stand today? Professor Carroll, it seems to me, gives us a new perspective on the status of educational science, and he does so without losing the optimism of Terman or underplaying the pessimism of Whipple. He identifies five neglected areas—relation between learning rates and aptitudes, motivation in school learning, improvement of instruction, relation of learning theory and teaching, and teacher competence. And he tells us that our lack of progress in these areas is largely due to our tendency to cut our problems to fit certain conceptions of research method.

In considering Professor Carroll's list of neglected areas, it is relevant to ask how he decides that an area is neglected. He does not mean by neglect that the given area has never been investigated; rather he is referring to areas quite familiar to us all as domains of study. What, then, are the criteria he uses to select the areas to which he calls our attention? These criteria are as follows:

First is the need of knowledge. By need is here meant the lack of knowledge. If Professor Carroll wishes to answer certain questions respecting educational policies and practices and the knowledge available is inadequate, then he claims there is a need. He then declares that the area from which such knowledge might be drawn is a neglected area. This is another way of saying that if what we have learned from previous studies in a given domain does not enable us to answer our practical questions, the area in question is a neglected one.

Second is the number of studies made in a given area. For example, Professor Carroll refers to the fact that there is only a handful of studies which deal with questions of how learning theory can be applied in the classroom. Here we are led to understand that the area of classroom psychology is neglected in the sense that there are few studies of it to be found in the literature.

Third is the failure to use proper variables. Thus we are told that the area of teacher competence is neglected because research studies usually fail to relate specified aspects of teacher behavior to specified changes in student behavior. In other words, an area is neglected, no matter how many studies have been made in it, provided these studies have not been adequately conceived.

Fourth, if no direct assault has been made on the area, it is said to be a neglected one.

Now, I believe that the application of these criteria by different individuals would probably lead to somewhat different conclusions as to what are the neglected areas of educational research. But I suspect that some of the areas named by Professor Carroll would show up in all the lists made by independent observers. Perhaps none of us is satisfied with what has been accomplished through research in education. There are questions to be answered in every aspect of educational work, questions for which answers cannot be found in the literature of educational research. So by the criteria we have before us, it would be difficult to find an area which does not belong in the neglected category.

Furthermore, in 1939, according to Brownell, a total of 3,500 investigations in reading and arithmetic had been reported since the beginning of the scientific study of these subjects. The total picture of research in education, as depicted by Monroe, is still more indicative of the growth of educational research in the past sixty years. Monroe estimated in 1937 that the number of investigations per year was about 5,000 and that the total number of studies during the forty years preceding was approximately 50,000. If research continued at the rate of 5,000 studies per year during the years since Monroe made his estimate, the present over-all picture would include about 165,000 studies. A conservative estimate of 2,000 studies a year would give us a total of about 100,000 studies. While I do not have a breakdown of these studies into areas suggested by Professor Carroll, I should be surprised were there not a large number of these investigations in each of these areas.

Now, I do not wish to suggest that the areas designated by Professor Carroll are not significant nor that they are not neglected, but rather to call attention to the fact that it is difficult to distinguish those which are neglected from those which are not. This leads me to wonder whether or not Professor Carroll's choice of words—neglected areas—is a happy one. Perhaps what he is really saying to us

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is that we have not learned to ask the right questions about the phenomena we investigate. Or, to put the matter in other words, we have not found a way of asking fruitful questions in the various domains suggested by Professor Carroll. It seems to me that he strongly suggests this possibility when he refers disparagingly to the use of questionnaires and inventories instead of observing behavior itself.

To ask fruitful questions requires, I suspect, firsthand knowledge of our phenomena. Perhaps we have not yet become thoroughly acquainted with the conditions, processes, and materials of teaching and administering schools, and, in consequence, do not know enough to ask productive questions. If this were the case, it would seem that we might well abandon some of our more refined techniques of research in the interest of getting closer to the raw materials which it is the object of our research to explore and ultimately to order.

Let us consider one area—motivation in school learning. Just what is motivation in the teaching situation? Is there any way to identify it in the moment-to-moment activities of the classroom? How can a teacher tell whether or not her pupils are motivated at a given moment? In short, what are the external, observable signs of motivation in pupils? We ordinarily think of drive, need, and incentive when we try to put our finger on the referent of the term "motivation." In most cases we assimilate drives to needs, leaving needs and incentives as the meat of the term "motivation." We usually think of needs as intrinsic and incentives as extrinsic motives. But what use can be made of needs in teaching pupils about the American revolution? What set of needs is relevant? What incentives are most conducive to learning about the American Revolution? How administer them? How are materials of instruction in this case related to needs? How is teacher behavior thus related? I do not claim that these are fruitful questions. I wish only to suggest that if motivation is to become valuable in teaching, perhaps we have to come down to specifics in our research. The high-level abstraction at which we now work is too far removed from the classroom. Could it be that we do not know enough about the actual phenomena of teaching and classroom learning to ask fruitful questions here? Could it be that we are stumbling around in a loose conceptual system and are thus unable to ask questions that will guide research along fruitful paths? Or could it be, as Professor Carroll suggests, that our preoccupation with certain methodological patterns of investigation blinds us to significant questions?

While we are grateful to Professor Carroll for calling our attention to certain areas of research in which there is still much need of scientific study, I wish somehow that he might have found an opportunity to explore these domains from the standpoint of their content and of the sorts of questions we might more profitably pursue in these areas. I like to believe that we might then have more easily moved a little further toward the day so optimistically depicted by Terman over forty years ago.

MPATI Announces Demonstration Schools

► The Midwest Program on Airborne Television Instruction has announced locations of thirty-one elementary and secondary schools selected to demonstrate the MPATI offerings. Most of the schools are being equipped, at no cost to the districts, by nine major manufacturers of TV equipment. The equipment includes antennas, distribution systems, and up to twelve receiving sets each.

Teachers, school administrators, students, parents, and others will be invited to watch an adequate receiving system in operation and see how televised instruction can be used in the classroom.

These schools are in addition to hundreds that have indicated they will equip themselves. More than half a million students in Illinois, Indiana, Kentucky, Ohio, Michigan, and Wisconsin are expected to view the first lessons beamed from an aircraft flying high over Indiana. Broadcasts, first announced to begin in February, have been delayed by technical difficulties encountered in outfitting the broadcast plane.

Equipping the demonstration schools will cost manufacturers about $100,000. In addition, school boards are contributing a total of about $25,000. Costs range from $3,500 to $5,500 per school, according to John E. Ivey, MPATI president.

The demonstration schools are the South Side Elementary and Urbana High in the Champaign-Urbana area, Ill.; Hoffman Elementary, Glenview, Ill.; Resurrection School and Luella Elementary, Chicago; Campus School at Western Michigan University, Kalamazoo; Sycamore Elementary and Holt High, Holt, Mich.; John Dewey School, Oak Park, Mich.; Crim Elementary at Bowling Green, O.; Worthington Junior High, Worthington, O.; Dublin Elementary, Dublin, O.; Central Elementary and Middletown High, Middletown, O.; Thomas A. Edison Elementary, South Bend, Ind.; West Lafayette High, West Lafayette, Ind.; Oaklawn Elementary, Monticello, Ind.; North Central High and Nora Elementary, Indianapolis, Ind.; University School, Bloomington, Ind.; Honey Creek High, Terre Haute, Ind.; Forest Park Elementary, Muncie, Ind.; Cochran Elementary, Seneca High, Omer Carmichael Elementary, Sally B. Rutherford Elementary, and Okolona Elementary, Louisville, Ky.; Alexandria Elementary, Alexandria, Ky.; West Elementary, Sycamore, Ill.; U. of Wis.-Milw. Campus Elementary, Milwaukee, Wis.; and Wines Elementary, Ann Arbor, Mich.

MEN *in education*

A Professional Pilgrimage in the Footsteps of HENRY PESTALOZZI

If, as A. H. Grommon once remarked, "anyone can be Pestalozzi from the back of the class," he must at least be familiar with the life and works of the great Swiss educator. A California teacher suggests here that the best way to absorb the Pestalozzi spirit is actually to go to Switzerland.

By EDWIN J. SWINEFORD

TOUT pour les autres, pour lui rien," is inscribed on the monument at Yverdun, Switzerland, to memorialize a mild, kindly, soft-spoken Swiss teacher, Henry Pestalozzi (1776-1827). "All for others, for himself, nothing" briefly describes the life of Henry Pestalozzi, "the savior of the poor at Neuhof, father of the orphans at Stanz, founder of the popular school at Burgdorf, and educator of humanity at Yverdun." I should like to suggest for American teachers a professional pilgrimage in the footsteps of this great educator.

The dedicated American teacher spends so much of his professional life on the minutiae of the teaching act that he seldom has time to look broadly and deeply at the total educative process. Now, however, as a result of the continuous upgrading of their preparation, many teachers are ready to assume their true professional stature. They are professionally mature; they need to become philosophers and thinkers weighing ends and means in education.

Teachers need to see education in as broad a perspective as possible, to climb a mountain and to look at their work and its place in the total order of things. The mature teacher needs to associate himself with a great idea or movement or personality, to enrich his understandings and rekindle his professional dedication. One of the ways to achieve this renaissance is the professional pilgrimage outlined here, a carefully planned professional experience that provides the opportunity and inspiration needed by teachers to change from manipulators of minutiae to professional practitioners.

Before I suggest a detailed itinerary for this pilgrimage, some of the reasons for focusing attention on Henry Pestalozzi ought to be given. First, although Henry Pestalozzi walked across the educational scene 150 years ago in a remote village in Switzerland, he left a documented record of personal dedication and professional sacrifice for youth that shines through geographical and cultural differences and defies the atrophy of time. The trials and tribulations, the successes and failures of this "Schoolteacher of the Ages," provide a rich and stimulating spiritual backdrop for an American teacher who is seeking meaning and direction in his professional life.

A second reason for focusing attention on Pestalozzi is that he had an influence on American education as well as an international impact. He looms large in the study of foundations of modern education and is already a familiar figure to American teachers in *Leonard and Gertrude* and other books.

In following the skeins of Pestalozzian thought, the American teacher will rub intellectual elbows with Rosseau, Von Fellenburg, Herbart, and Froebel. Pestalozzi exerted a direct influence on the American educators Horace Mann, Henry Bernard, and Edward Shelton. Joseph Neef, one of Pestalozzi's assistants, came to America and established a school. Herman Krussi, son of one of Pestalozzi's assistants, taught at the Oswego Normal School in New York State. Many Amer-

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ican educators visited Pestalozzi's school at Yverdun, along with the great educators of Europe. William H. Kilpatrick has summarized the influence of Pestalozzi, saying, "[He was] the one man who more than any other in educational history succeeded in shifting educational aims and procedures from a long prevailing faulty pattern to a distinctly different pattern. . . . "

Renewed Interest in Pestalozzi

Pestalozzi's influence on education is being extended by continued investigation and study. This visionary, radical teacher, often misunderstood in his time, has recently been the subject of an extensive biographical study by one of Germany's eminent writers. A scholar in Scotland is preparing a new volume on Pestalozzi. An ongoing project undertaken by the Pestalozzianum, a professional organization for teachers in Zurich, is the publication of twenty-five volumes on all phases of Pestalozzi's teachings.

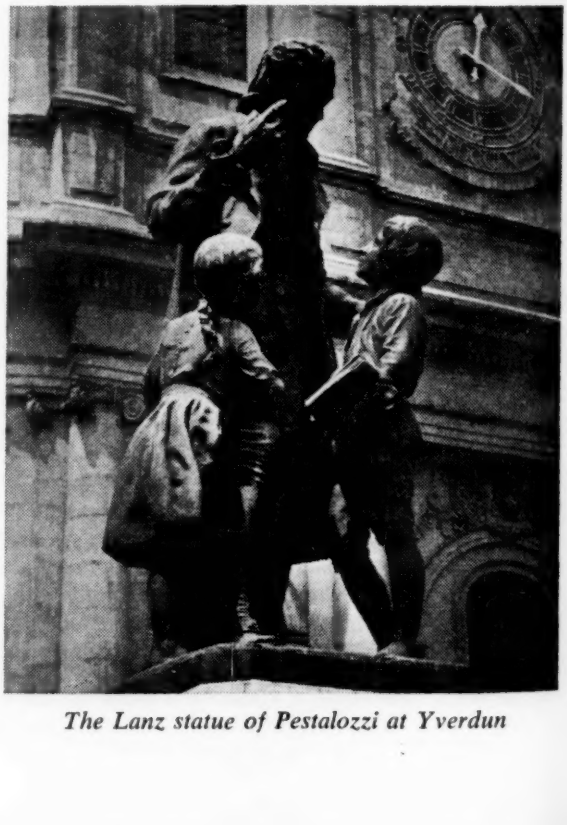
Finally, following the footsteps of Pestalozzi will bring the American teacher in close contact with the schools of Switzerland, providing an entree or common ground of understanding that will lead inevitably to a better appreciation of the Swiss schools. The schools in the cantons of Switzerland constitute, in my opinion, the most prolific source of progressive ideas on education to be found in Europe today.

The final reason for focusing attention on Pestalozzi is that the Pestalozzi pilgrimage is within the physical and financial reach of most teachers. With my wife and two children, ages ten and eleven, I have just made this pilgrimage. Some teachers may want to make the trip as a part of a more extensive continental tour. Certainly no less than a month in Switzerland should be reserved for the suggested itinerary, preferably in May, June, or July, when the Alpine passes are open and schools are in session. Once on the continent, travel by private car is suggested, although the historical monuments and towns can be reached by using the efficient Swiss bus system or railroads. Safe, modern highways beckon one; excellent accommodations with a wide price range and superb food, whether eaten at a restaurant or from a picnic basket on a grassy slope, are all available. The usual tourist attractions take on more meaning when sandwiched between the series of thrilling professional experiences one enjoys as he follows the Pestalozzi trail through the Swiss wonderland.

Before disembarking, the teacher should review Swiss history and geography, become familiar with the organizational pattern of the Swiss schools, and dig a little deeper into the background of Pestalozzi and his writings.

The suggested itinerary starts at Yverdun, Canton of Vaud, located on the shores of Lake Neuchatel, about three hours' drive from Geneva. In 1805 this small French-Swiss town invited the young school teacher from the Burgdorf Institute to take charge of its school for the poor. It was this school which attained international recognition under Pestalozzi's direction. Yverdun today is prosperous, with busy streets, expansive lakeshore parks, and healthy children. The twelfth century chateau of Yverdun still dominates the center of the town. Near the castle and town hall stands the Alfred Lanz statue of Pestalozzi, life-size, holding the hands of two of his students. The ancient castle is still used as a school and museum. As you walk through the castle halls, guided by a Swiss whose face lights up when you show interest in Pestalozzi, you will see the rooms and hallways through which raced Pestalozzi's students.

Step into the office of Monsieur Clement Mermoud, the school director, located in the new school across the street, and he will provide you with a guide to visit the classes in the old chateau, as well as classes in Yverdun's sparkling new schools. The "Salle Pestalozzi," or Pestalozzi Chamber, was opened in June, 1959, and contains the personal belongings of the beloved teacher. "So many came," the principal commented, al-



The Lanz statue of Pestalozzi at Yverdun

though we found few American addresses in the guest book. In addition to the personal effects, one can see Pestalozzi's crude desk, given to the Salle Pestalozzi by the same family that received it from Pestalozzi many years before in payment for milk and agricultural products for his needy students. While in Yverdun, visit the Pestalozzi farmhouse on the edge of town. A simple plaque states, *"In 1818 Henri Pestalozzi crea dans cette maison son ecole de pauvres."*

The Pestalozzi pilgrimage in Yverdun would not be complete without a visit to the town cemetery and the memorial to Anna Pestalozzi (Anna Schulters), whose memorial was erected from contributions by the Swiss women in tribute to this remarkable woman, who for forty-six years was wife and companion to the "impractical dreamer."

Before leaving French Switzerland, stop overnight at Gruyers, a small, peaceful village near Fribourg. It reflects rural life as it was lived 150 years ago.

The Orphans' Home at Stans

The next stop should be Stans, near Lucerne, the location of Pestalozzi's home for orphans. Here Pestalozzi attracted wide attention by directing a school in which there was no whipping or "superficial verbosity." Go north through Berne to the medieval castle or schloss at Burgdorf, the next step in the pilgrimage. High on a hill in the somber German-Swiss town with its steep, crooked streets and medieval buildings stands the Schloss Burdorf, like a sentinel over the never-changing town. It was in this castle that Pestalozzi for three and a half years directed his popular school for boys and girls. The classrooms were on the top floor, which is now a museum. The obscure marker that the community placed on the ancient castle wall repeats a message from Pestalozzi's *How Gertrude Teaches Her Children,* which was published while he was at Burgdorf. "Es spricht die gottliche stimme in uns. Lebe nicht dir, Lebe den bruder." (Speaks a divine voice within us. Do not live for yourself, but love your brother.)

From Schloss Burgdorf continue on to Switzerland's largest city—busy, industrial Zurich. A statue of Pestalozzi occupies the center of a large, green square on Bahnhof-Strasse, Zurich's renowned shopper's paradise. The living spirit of Henry Pestalozzi is captured more effectively by visiting the Pestalozzianum Backenhof, the professional center for teaching materials and professional literature. Among its 100,000 books are over 1,000 volumes on Pestalozzi. Ask for Dr. Wathe Gilber, the director, a busy man who seems never too busy to talk (in perfect English) about his favorite subject, Pestalozzi. He will conduct you through the sparkling new Pestalozzi memorial rooms, where you will see more of Pestalozzi's personal possesions, his cradle, organ, books, portraits, and death mask. Here you may purchase postcards and slides that show significant Pestalozzi realia. The street down which Henry skipped as a boy is near the Pestalozzianum, and his childhood home still stands nearby. Before leaving Zurich visit several schools and the community recreation centers. The schools of Zurich are housed in ultra-modern buildings with elaborate equipment and highly qualified faculties. The emphasis on industry and efficiency in a democratic framework is of special interest to American teachers.

Finally, in the northeast corner of Switzerland, in the canton of Appenzell, is the small village of Trogen. An easy two-hour drive from Zurich, it is the last stop on your pilgrimage. High on the mountain, with beautiful Lake Constance in the distance, is the Kinderdorf Pestalozzi Trogen, or Pestalozzi Village. The site for this children's village was donated by the town; the idea of a village for children who were left without parents as a result of World War II came from a crusading publisher in Zurich; the dream of a home for needy children, wherever they may be, came from Henry Pestalozzi. Approximately 300 boys and girls from many European countries live permanently in the village. Each nationality is in a separate "home" where they take their meals and try to approximate family life. Guests are welcome to visit the school. Herr Arthur Bill, the director, will arrange for your tour of the village. Here the pilgrim will see one of Pestalozzi's dreams come true, a prosperous, modern, beautifully-landscaped, fully-equipped and expertly-staffed village for needy children.

The pilgrimage may be over, but the insights will live on. The mountain will have been climbed, and a broad, sweeping view of ends and means in education will be possible. The companion on this pilgrimage will be a humble, somewhat ugly and harassed visionary, Henry Pestalozzi. Like yourself, he placed love of children above all else.

► New York University has reported a record foreign student enrollment for 1960-61. Some 3,104 citizens from eighty-six foreign lands have been taking courses at NYU's fifteen schools, colleges, and divisions. Among them are more than 1,000 from India, China, the Philippines, Korea, Japan, and other Oriental countries.

SUPT. HOWARD

A School of the Future IN OPERATION

Last month the "Trump Commission" published Focus on Change, Guide to Better Schools, *a summary of its four-year effort to learn how to make better use of the secondary school staff. Listed at the back of the book are nearly 100 schools which have taken part in some phase of the project. Only one, the new Ridgewood High at Norridge, Ill., has put* all *of the commission recommendations into operation. Here is a description of Ridgewood, written by one of the co-authors of* Focus on Change.

By DORSEY BAYNHAM

RIDGEWOOD High School, Norridge, Illinois, is a working model of the complete school blueprint developed by the NASSP-established, Ford-financed Commission on the Utilization of the Staff in the Secondary School. Other schools from Massachusetts to California have adapted segments of the commission's recommendations, but Ridgewood was planned, built, and now functions in accordance with ideas which grew out of the commission's four-year research project. A summary report of the project, *Focus on Change,* was published last month.*

A visitor to Ridgewood—even in the first few months of operation, when workmen's tools still littered the halls and painters and electricians outnumbered teachers—was struck by the general air of enthusiasm. It fairly curled out from under classroom doors. It could be heard in the remark of a young science teacher: "We're seeing it work!"

The new school opened its doors last fall to 425 freshman and sophomore students from three suburban communities located about fifteen miles northwest of Chicago. Designed to hold 1,000 students, it will expand to include grade eleven in 1961-62 and grade twelve in 1962-63.

Other statistics include the fact that the school cost $2 million, including equipment. The basic contract was $13.50 per square foot, without equipment, a low figure for high schools in this area. The budgeted per pupil cost for 1960-61 was about the same as that for other nearby schools.

Ridgewood's students do not come from movie-version suburban families. Their parents are predominantly second generation Poles or Italians, with low medium or medium incomes. The area is undergoing rapid industrial development.

Elementary schools in the district have a reputation for conventional but thorough teaching. High-school students, in the years before Ridgewood, went to several nearby high schools, including the well-known and high ranking Maine Township High.

A first step in any new secondary school, apparently, is the building up of student morale. For Ridgewood, this was doubly necessary. Not only would its students be pulled from the security of well-known schools and established routines; they would also be thrust into a strange, new building with stranger still classes and schedules, one period listening to a lecture with more than 100 other students, the next period joining a discussion group of only ten or twelve.

To combat low morale, Ridgewood's energetic young superintendent, Eugene Howard, and members of his counseling staff, in the months before school opened met at least once with each student, alone, and a second time with the student and his parents. During these sessions, Howard and his counselors discussed the student's interests and described future school functions. Howard remembers that "a lot of fears and rumors were nailed down during those talks."

The staff also outlined five beliefs basic to

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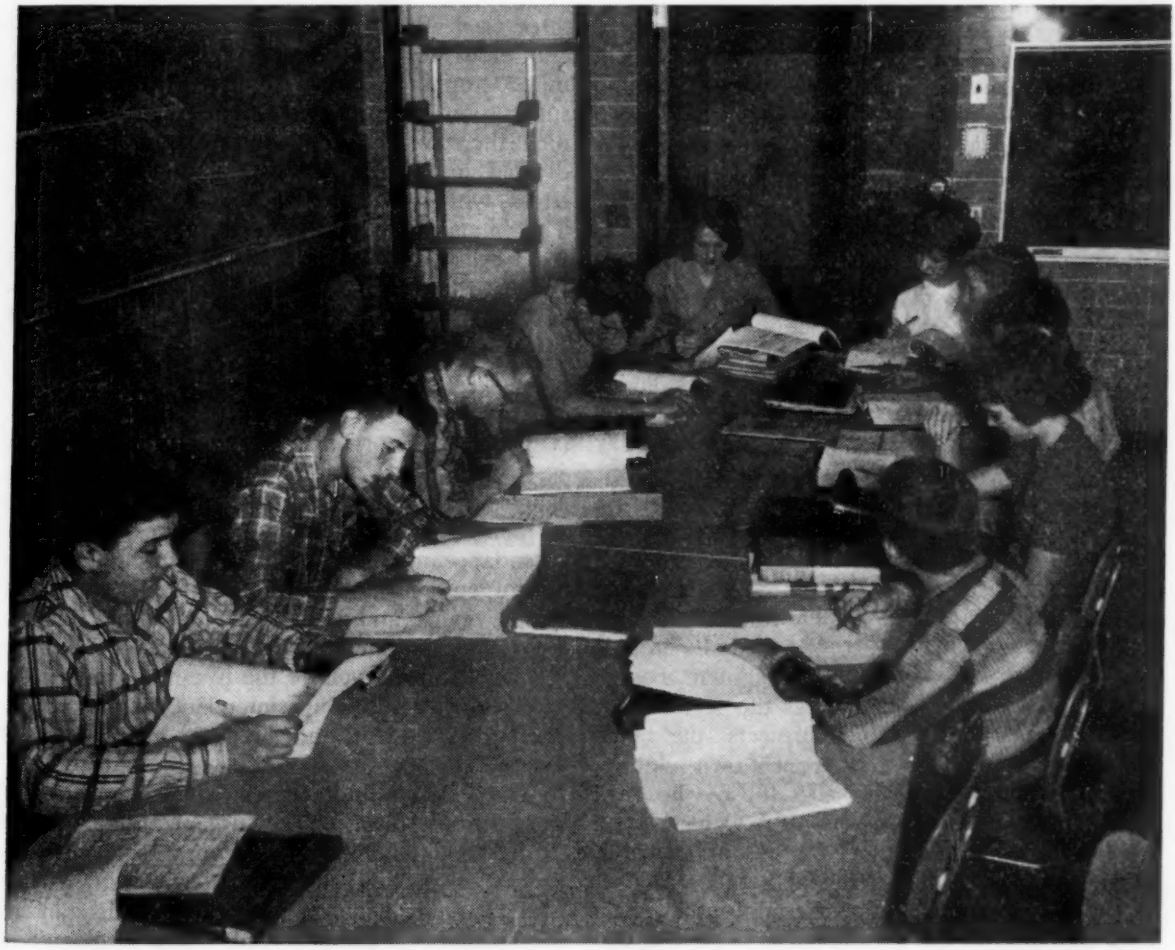
* By Rand, McNally of Chicago, Ill. Written by J. Lloyd Trump and Mrs. Baynham, it is available for $1.25 in the paperback edition.

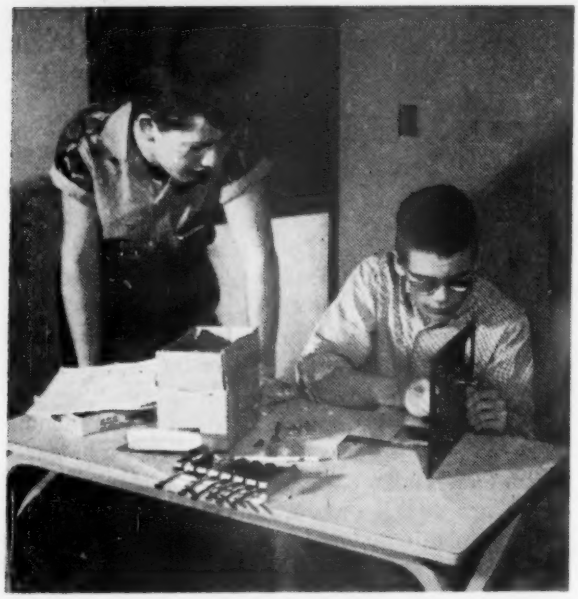
Ridgewood's curriculum planning and their implications for the school's teaching and learning. In themselves, the beliefs make little news. Used not as a motto on the wall but as actual daily guidelines against which all school plans are charted, they are news, indeed. Here are the five basic beliefs:

- The unique purpose of education is development of intellectual powers.
- Basic skills, knowledge, and appreciations should be attained by each person to the highest level possible.
- An important aim of the school is to develop each individual's capacity to assume more and more responsibility for his own education. Intellectual development must not cease when the student leaves school.
- Every area of human knowledge has significant contributions to make to each student's intellectual growth. Thus, students should *continuously* participate in learning activities in the humanities, mathematics, science, practical and creative arts, and health and physical education.
- The rate of progress through the school should be determined by the readiness of the individual to move from one stage to the next. The stages do not necessarily synchronize with pupil age.

To translate these beliefs into action, Ridgewood's master schedule calls for pupils spending, on the average, 35 per cent of their time in large-group instruction, 30 per cent in seminars and laboratories, and 35 per cent in individual study. (It is sometimes a source of wonderment to commission members that the project recommendations today are known primarily as "large-class" recommendations. Small classes and individual study are equally important commission recommendations, with the latter being perhaps the single most important characteristic of projected



At Ridgewood High, students spend 30 per cent of their time in seminar-sized groups like this. Here, under a student chairman, math students are discussing material presented by the teacher to a large group.



The "secondary school of the future" stresses taking responsibility for one's own education. Hence a good deal of time is spent on individual study. Here industrial arts students use their individual study time for project work.

"schools of the future," especially for academically talented or highly creative students.)

Ridgewood was built with special facilities for the three types of learning—large classrooms for large, so-called lecture groups; small classrooms for small discussion groups; and individual study areas, some of which contain individual study booths. Ridgewood offers the sharpest contrast to older schools in its study areas. There are ten: the foreign language, homemaking, and reading laboratories; the science and humanities resource centers; the art rooms; the typing room; the music area; the mathematics study groups; and the library. Each study area is located next door to or right across the hall from the staff office for its particular study subject. At least one staff member is always available for student consultation or guidance. Also, each study area is furnished with its own specific equipment, books, and study resources. This allows the science student to proceed on science projects, the home economics student to design her own clothes, and the art student (and also those who seek merely an appreciation of the arts) to hear taped music and to explore the cultures of the world.

Ridgewood's study arrangements allow a one-to-one pupil-teacher ratio. Certainly they bear little similarity to most study halls, where a teacher, instead of teaching, stands guard at the head of a long line of desks.

The individual study booths, incidentally, are an innovation whose design was worked out jointly by Superintendent Howard and the manufacturers. When Howard first approached school suppliers for study booths, not only had they never sold such things, they had no idea what he was talking about. Study booths are used to great advantage by the more self-directed students, but teachers are wary of permitting their use by gregarious pupils.

The school's large classrooms, big enough to hold about 125 students, are equipped with rows of auditorium seats with arm rests. Overhead screens, microphones, tape recorders, and curtains to eliminate light are regular equipment. Installations are ready for closed circuit television, but this is a project for the future.

Small discussion classrooms are only large enough to seat fifteen students and a teacher around a big discussion table.

Ridgewood's staff is made up of twenty-one professional teachers, six instruction assistants, three clerical assistants, and three part-time general aides for such non-professional tasks as mimeographing, record keeping, and cafeteria supervision. For the purpose of curriculum planning, the school's professional teachers have been divided into two divisions, humanities and sciences, with two teaching teams in each division. The humanities division plans courses of study for English, history, art, music, and foreign languages; the sciences division for science, mathematics, practical arts, physical education, and business education.

School Organization Plan

The school's organizational plan for instruction is a pyramid in shape, with the four teaching teams at its base. Directly above the teams are an administrative assistant who is responsible for attendance and business management; and a director of guidance, who acts as testing consultant to all teams and whose responsibilities include personal, vocational, and educational counseling. The next three levels of the pyramid are, respectively, the assistant superintendent for instruction, the superintendent, and the seven-member school board.

The school's outlined plan for organization of instruction states: "The organization plan of Ridgewood High School encourages teacher cooperation across subject-matter lines, so that students may achieve a depth of understanding not usually possible." And, "The management portion of the principal's job has to a large extent been delegated to an administrative assistant, thus

freeing the assistant superintendent and the director of guidance to work directly with the teaching teams in improving instruction."

"Everyone in the school teaches, including myself," Superintendent Howard told this reporter. "I teach somewhere in the school twice each week in English. This allows me the best possible opportunity to evaluate what we're doing."

Most members of the teaching staff are quite young, or perhaps they just seem that way because of their zeal for what they're doing. Each one went through an extended two-way interview with Superintendent Howard, lasting several days, before there was mutual agreement that the applicant would fit into the new school staff. Science teachers came straight from the National Science Foundation.

Ideas from All Over U.S.

Howard says: "I knew before I interviewed the first applicant what the school was going to be like." Howard had attended classes at the University of Illinois with Dr. J. Lloyd Trump, director of the Commission on the Experimental Study of Staff Utilization. He later followed commission recommendations, especially as outlined in its booklet *Images of the Future*. Today he says: "Ideas for Ridgewood came from all over the country. I went to schools which had adapted segments of the program—closed circuit television at Snyder, Texas; school design at Syosset, New York; team teaching at Newton, Massachusetts—and from these visits a picture of a school began to take shape."

Last summer Ridgewood's teaching teams made extensive plans during a month-long workshop. They emphasized a unified approach to subject matter in the respective areas, but they also spent a great deal of time and deliberation on plans for crossing subject matter lines wherever possible.

At the high school today most teachers are scheduled for class instructional activities for slightly more than half the time that school is in session. The remainder of their time, divided into blocks of one hundred minutes or more, permits other professional activities, uninterrupted time for preparation and study, and time for consulting with individual students. While there are comparatively few meetings of the staff as a whole, there are division meetings almost daily. The science staff, also, meets daily.

These teachers are convinced that the team approach allows them to use their individual talents more often and to better advantage than the conventional approach. A visitor to the school saw this idea demonstrated in the unusual situation of the music teacher teaching an ancient history class. He was lecturing on Egyptian music and he played records to illustrate his talk.

Also, the visitor heard this conviction expressed in a variety of ways in the staff lunchroom at noon:

"If boards of education are on the ball, this can't help but spread across the country."

"I've never had enough time, before, to prepare for my classes—nor such a sense of satisfaction in teaching."

"I put in thirty hours of work on my first lecture and I had so much material I didn't know what to do with it all. I had to reorganize my lecture to make sure I was using the best of it."

"This is the answer—for me."

One teacher, a young woman skilled in working with children of below average intelligence, spoke with quiet pride of a task just finished that morning. In Ridgewood's reading development program, a group of eight students under her direction had completed a reading unit which several weeks earlier had seemed impossible to them.

How do the students feel about this strange new school? As far as they're concerned, by now it is neither strange nor new. The summer counseling sessions helped them to exchange pride in their

Ridgewood teachers and students get to know each other personally during individual study time. Here the art teacher gives attention to an art student engaged in project work.

former schools for pride in Ridgewood. And they're aware they're making education history.

(Their high morale is not all due to such high-flown ideas, of course. Ridgewood High School started its football team in midsummer, just a week after the athletic director sent all male students an invitation to try out for the freshman and sophomore teams. Seventy boys came out. And—a further note on morale—out of the teams, peculiarly enough, came most of the membership of the Future Teachers of America Club.)

Students scheduled to enroll at Ridgewood as freshmen underwent a testing program in the eighth grade of their elementary schools. Sophomores arrived with testing and achievement records of their freshman year at other high schools. At the new school they were divided into top and low ability sections for each grade level. The sections were further subdivided into an accelerated group, a remedial group, and the average group.

Ordinarily, students attend large classes first thing in the morning, always reporting to the same room but changing teachers almost daily. For example, 125 students reporting to Room 310 every day at 8:30 a.m. will hear a lecture on English literature on Monday, history on Tuesday, humanities enrichment on Wednesday, English grammar on Thursday, and history again on Friday. Large group lectures mean fairly lockstepped instruction and are best used for introducing units of work, for explaining fundamental ideas, and for testing. Individual study helps students break out of the lockstep and small group discussion offers the possibility of 100 per cent student participation in learning.

In the small discussion groups, Ridgewood teachers are learning the same thing other teachers have learned of this kind of instruction: that it is frequently a more difficult teaching task to *guide* the discussion and thinking of a small group of students than it is to lecture to a group of 125 or even to teach a regulation class of thirty. Furthermore, there seems to be something diametrically different in the idea of teaching *per se* and of guiding learning. According to commission thinking, small group discussion classes must be completely student-centered.

In the discussion groups, twelve to fifteen students with an elected chairman develop ideas first encountered in a large class lecture or from individual study. Usually they are all anxious to contribute. "Sometimes," says Howard, "you can leave the room and they won't even know you're gone." All students, regardless of ability, are provided with opportunities to participate in these sen.inar groups.

In the large group classes, at least two members of a teaching team and sometimes more are always present. In individual study, students may carry out personal study projects or work together in small groups of four to six students.

Ridgewood's master schedule has modules of twenty minutes. There is no such thing as an hourly bell ringing, followed by jammed halls as everyone changes rooms. The twenty-minute modules permit individualized student schedules and a great deal of flexibility. But scheduling nevertheless is an administrative headache which will yield only to patience, hard work, or an IBM machine. Ridgewood looks forward to the use of automation as soon as possible to help it work toward its goal of the greatest possible contact between individual students and teachers.

There are other problems. Perhaps challenges is a better word. The teachers speak of greater satisfaction in teaching because they have more time to prepare lessons, a highly important factor in any school program in these days of exploding knowledge. But they speak also of the need to keep their minds constantly on the major goal—"of teaching students to take more and more responsibility for their own education, so that when they get out of high school their education won't stop just because someone is no longer cramming it down their throats." This means creativity in teaching, learning to evaluate their own work and to pool ideas. Superintendent Howard says: "Some of the staff, after the summer workshop plans were mapped out, got the idea that all was now okay. But they're finding out that they have to make the plans work and there's a lot of work—daily—in that."

But for the entire staff the goal is worth the effort. Their superintendent puts it this way: "We believe our students will take the responsibility for their own education, themselves, by the time they leave high school. We expect to instill in them values that mean their education will never end."

It is possible for team teaching programs to fail. When they do, it is because of inherent limitations of teachers and administrators, says Charlotte Levens in an article planned for the June KAPPAN. She adds: "The requirements for personnel operating as a team are the same as they are for the traditional organization. But the fact that teachers and administrators do not measure up to a democratic and intellectual ideal in the traditional school is the very thing that makes team programs a valuable tool for instituting movement toward those ideals."

Next Stop, Fed-Aid!

A fable whose moral is (we think): A boy is not a church.

By RAYMOND A. HOCK

I HAD not been on a train for several years but my train-riding luck was holding true to form. It was a hot, muggy day and the air conditioning had broken down. Thoroughly disgusted with the situation, I had just settled back to beat the heat by dozing when I heard the conductor announce, "Next stop, Fed-Aid. There will be a two-hour layover for engine repair."

"Things are going from bad to worse," I mused as I tried to decide between staying on the train and getting off to seek some relief in the town.

It wasn't a bad little town. In fact it looked like a rather nice place. Clean looking, with large trees shading the streets, it was a typical Smalltown, U. S. A. I wandered around for a few minutes until I noticed a large crowd gathered on the town square in front of the public library.

"What's going on?" I inquired of a bystander.

"Oh," he answered, "this is our annual School Privileges Day."

"School Privileges Day!" I echoed, "that's a new one on me. What does it mean?"

"You must be new around here," was the reply.

After I admitted being a stranger, my informant introduced himself as Charley Sims and proceeded to explain what was going on. "A couple of years ago the Chamber of Commerce and some other civic groups like the American Legion and the Kiwanis Club decided to have a day like this before the start of school each year. They figured most kids don't appreciate what they're getting in an American style education and they ought to do something to drive home what a real bargain it is. Come on in and I'll show you how it works."

We worked our way through the crowd and went into the library. Inside there were groups of children lined up in front of several tables. Behind the tables were teams of adults busily engaged in checking long lists of names and handing out different colored tickets. Each table had a sign on it. There was one marked *Free Transportation*. Another bore the label *Free Books*. The last table had a larger sign which read *Free Classrooms and Teacher Services*.

"What are they doing?" I asked.

"Well," answered Charley, "the kids go to the tables and pick up tickets for the different things the schools give them. Sort of like a free pass."

I nodded and continued, "But how about the last table? They don't give each child a classroom and a teacher, do they?"

"Naw," laughed my companion, "it's just an easy way to tell the kids what class they're in. The tickets have the name of the teacher and the room number on them. It just makes kind of a production out of the whole thing. Helps them to see that they're getting something for free and that everybody gets equal treatment. Drives home the American idea of a free education for everybody."

He went on to tell me that the townsfolk wanted to make the impression pleasant as well as lasting. They tried to achieve this by admitting each child who had completed the ceremony in the library to a picnic at the local ball park. There were games for the smaller children, dancing for the high-school students, and free hot dogs, pop, and ice cream for all.

As I turned back to watch the proceedings, I wondered how effective the program was. One could not help but admire the spirit and willingness to act which motivated a whole community to try to teach its young people a wholesome lesson. If this alone rubbed off on the children as they grew up, it would be a good thing, maybe even sufficient to justify the whole operation.

At this point I noticed one little boy approach the *Free Transportation* table, leave without picking up his ticket, and proceed to the other tables where he was given the rest of his entitlement. I asked Sims about this.

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"That's Frank Jordan's boy," he answered. "Frank works the swing shift at the meat-packing plant. Doesn't have much time with his kids, so he drives them to and from school to get a little more time with them. His kids don't need the bus-ride ticket. They get all the rest, though."

A similar incident at the *Free Books* table prompted the explanation, "That's Sylvia Fairfield. Her folks are loaded with dough. They want her to have her own set of books, so they send to the publisher and buy a set. She doesn't need a book ticket but she uses all the rest."

I was just beginning to wonder if there was anything about anybody in this town that Mr. Sims did not know when I noticed an argument going on at the *Free Classrooms and Teacher Services* table. The father of one of the children was obviously very much excited about something. I edged closer and listened.

"What do you mean, give them all back?" he was saying. "A lot of other kids refuse one or another of the tickets but you don't make them give the rest back. Now, just because my child doesn't need this one you say he can't have any of the others."

I turned to my informant but he anticipated my question. "That's Bill Jenkins. His boy goes to the local parochial school. He doesn't use our schools or teachers, so naturally he can't have any of the other services."

"How come?" I asked. "They didn't deprive any of the others of any services just because they didn't need them all. Why single out this child?"

"Can't give him anything when he goes to a parochial school," was the answer. "Violates the separation of church and state."

"Separation of church and state forbids supporting a church," I said. "That boy is not a church. He is the child of a taxpaying citizen. Shouldn't he be allowed. . . . "

I did not get a chance to finish my question. Sims, his tone no longer friendly, cut me off with, "Look, I maybe don't have a lot of education but I've done plenty of reading. The people who study these things and write about them in magazines and books say it violates it and that's good enough for me. Maybe you better head back for your train. I don't think it's a very good idea for strangers to come into a town and criticize the way folks do things."

Why Bus Transportation?

A reply to 'Next Stop, Fed-Aid' and all such special pleadings

By R. L. HUNT

SHOULD bus transportation at public expense be provided for children going to parochial schools?" The answer "Yes" is given in a dramatic form by Raymond A. Hock on page 355 of this KAPPAN.

The Committee on Religion and Public Education of the National Council of the Churches of Christ in the U. S., which I serve, tended to give a like answer in 1958, but now says "No."[1]

Why?

Before I answer, let me report a bit of personal experience, inquire into some definitions, and offer some facts showing the significance of the question.

Transportation costs constituted 52 per cent of the current operations budget of the Bassfield Consolidated School District in Mississippi when I became its superintendent in 1927. We operated sixteen bus routes bringing children from 120 square miles of cutover pine lands then being transformed into cotton farms. In my first superintendency, I took it upon myself in the first month to ride each school route once, morning and afternoon.

One of the bus routes began near the county line, seven miles from school. About half way

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[1] See the PHI DELTA KAPPAN, May, 1959, page 302, for quotation of the earlier draft. The current answer is reported in "Relation of Religion to Public Education," *International Journal of Religious Education*, April, 1960, pp. 26-27. Available in reprint, 10 cents, from Department of Publications, N.C.C.C.U.S.A., 475 Riverside Drive, New York 27, N. Y.

back, with the bus half full, we passed a group of students on foot. They were headed for another school a quarter of a mile from ours.

The driver commented, "You see those Negroes? They walk from beyond the end of our route. They did not miss a day of school last year. That's better than the kids who rode from the end of the line with us."

Such devotion to education will pay off, I told myself. If they pay that kind of price, they will earn their place in this world. Are they not entitled to ride now?

When still a mile from our school we passed another group of children on foot. These were white youth.

The driver commented: "They are headed for the parochial school. Sometimes their daddy takes them in his car, and sometimes they walk."

I knew where they were headed. Their school was a hundred yards down the road from ours. And I told myself, they are indeed paying a price for liberty.

Was the case the same for the two groups of children who were walking? I struggled with this question then. The question is still with me.

What is bus transportation? It is said that the U. S. Supreme Court has "approved" bus transportation. Just what was the statute the court considered?

The New Jersey statute under review in the 1947 Everson case said that when any school district provides any transportation for public school children to and from school, transportation from any point in such established school route to any other point in such established school route shall be supplied to school children residing in such school district in going to and from a school other than a public school, except such school as is operated for profit in whole or in part. Under this statute, public school trustees established routes to take children to public schools. No plans were made to take children *all the way* to any other kind of school.

State Courts in Hopeless Contradiction

State courts in different states were in hopeless contradiction over a variety of such laws. The U. S. Supreme Court divided 5-4 on this one. The ruling majority said the law did not violate the First Amendment to the U. S. Constitution, commenting that the statute in question "approaches the verge"[2] of permissibility. The other four judges said it had passed the line of constitutionality.

With the word that the Supreme Court had "approved" bus transportation for parochial school children, the legislature of New York soon passed a law on the subject. It required every school district in the state, whether or not providing transportation to anyone else, to provide transportation to pupils attending church-sponsored schools of their parent's choice up to ten miles from the school district line.

The public school district in which I am resident, Mt. Vernon, N. Y., is about two miles square. It has no plan of transportation for any but handicapped children. The new statute required taxpayers to provide transportation up to ten miles beyond the district line in each direction for children going to parochial schools. That makes a transportation district of 484 square miles. Private school pupils were not given any such privilege. As with the public school children, it was still up to them to walk.

What Could Happen in One City Block

Consider what would happen in one city block: In the first house, Parents A might wish their son to attend the college preparatory school operated by the Jesuits six miles south of town. In the second house, Parents B might wish their young children to attend a parochial school three miles west. In the third house, Parents C might choose to send their daughter to a school operated by sisters of an order eight miles to the north. In a fourth house, Parents D could choose a vocational school ten miles east. By the statute, the school district must provide transportation in each case.

Administratively, this law is full of headaches. I do not believe the court would judge it, or any route planned solely to take children to a church institution, constitutional. The statute has already been amended in response to its impracticability, but the text of the new statute is not yet available to me for comment. The situation points up my question: What do you mean by bus transportation? The term needs definition.

The significance of the whole transportation question comes into focus when we consider the fact that one of every three children attending a public school gets there on wheels paid for out of taxation. In 1957-58, according to the U. S. Office of Education, 10,861,689 children in average daily attendance were transported at public expense. This number was 36.5 per cent of all school children. Total transportation costs were reported to be $416,491,000, or a bit over 4 per cent of the current operating budget that year. Each child riding cost the taxpayers $38.34, the national average. Sample figures ranged from $122.96 per child per year for Wyoming (9.2 per

[2] Everson v. Board of Education. 330 U.S. 1. (1947)

cent of the operating budget) to $17.98 per child riding in North Carolina.[3] Non-public school children to the number of 104,095 were reported riding that year in eleven states plus Guam and the Virgin Islands. Seventeen states now have statutes permitting such transportation for non-public school children, and Maryland permits county option on the matter.[4]

Parochial schools currently enroll more than 5,000,000 students, one of seven or eight in the United States. If one-third of them should ride, substantial sums would be involved. Why do some men of good will say "Let them ride" while others say "No"? Let us examine the arguments.

Arguments for Bus Transportation

The arguments I hear for bus transportation can be grouped under these classifications for our present purposes:

1. The state has a duty to protect children. Once it was necessary for the police power to protect children from savages or wild animals. New dangers come from traffic hazards, maniacs, kidnapers. The police power of the state should now protect children from such hazards by providing bus transportation as they go to the schools of their parents' choice.

2. Bus transportation is necessary to implement religious freedom. To keep a parent truly free to choose a school in which religion is taught, costs should be the same.

3. As a matter of right, children who attend parochial schools are entitled to equality with those who attend public schools. In both kinds of schools, children meet requirements of compulsory school laws and prepare for citizenship in such matters as suffrage and military service. The state should pay equally for both kinds of schools.

4. It is unfair to discriminate against children attending church-related schools.

5. Parents who choose schools for religious reasons are being doubly taxed, in manifest injustice.

These arguments are being advanced warmly, even heatedly. With what lines of argument in opposition must they be weighed?

Arguments Against Bus Transportation

The lines of argument which I hear against providing bus transportation at tax expense for children attending the church-related independent schools may be summarized as follows in response to the arguments stated:

1. The police power and public welfare arguments would greatly extend the welfare state. Where would it stop? Should the state provide transportation for every wish of the child, or his parents? Personal whims plainly carry us too far; the responsibilities of the state must be limited to the public purpose. What is the public purpose to be served by hauling children to the church-related schools?

It may be noted that this is the only argument advanced in behalf of bus transportation which is somewhat limited to bus transportation. All the other arguments equally support using tax money for paying teachers in parochial schools. To me, this argument has some merit, even if there are school bus accidents. Were it possible to consider the question on its own merits, separate from the larger considerations, it might be persuasive. The change in vote from the Committee on Religion and Public Education noted in the second paragraph of this article came when it was found that realism requires the question to be considered in relation to the larger context of tax money for instruction in the non-public schools. To the committee were brought reports of arguments in many states to this effect: "Look! You've admitted we are really public schools by giving bus transportation! Now give us the money for salaries for teachers!"

It seems to me that Brother Hock's parable would more accurately reflect the facts had Bill Jenkins reversed the order of the desks, in which case he would get free teachers and classrooms after picking up the tickets for free books and free transportation!

This is the "camel's nose" argument, of course. "It's just a little money, why make such a fuss?" It can become a matter of principle, in the tradition of "Millions for defense, but not one cent for tribute!"

2. Religious freedom can be maintained only by keeping religion voluntary, an act of the free person.

Independent schools of the several kinds, church-related and private, are valuable as live options for the parent. They prevent a monopoly of education by the state. But if the state pays the bills, the state will rightly control the schools

[3] Data from W. Vance Grant for the forthcoming *Biennial Survey*: Chapter II, Table 23, "Selected Data on Pupil Transportation and School Lunch Programs by States, 1947-58."

[4] Fred F. Beach and Robert F. Will, "The State and Nonpublic Schools," Miscellaneous No. 28, 1958, U. S. Office of Education, U. S. Department of Health, Education, and Welfare, Washington, D.C., with additional data from Robert F. Will, March 17, 1961. See also Glenn Featherston and John B. Murray, "State Provisions for Transporting Pupils," Office of Education Circular No. 453, 1960.

that were formerly independent, so that the safeguard of the live option available for the parent is lost. Religion loses its character when it relies upon compulsion, upon the power of the state to collect tax funds. For the independent school to accept tax funds is to assure its loss of independence; it becomes another state school, and so has no reason for existence.

In Bassfield, for example, the parochial school taught that my religion is no good. It has a right to teach that while it pays its own way. When it accepts tax funds, the rules on tax funds apply.

Free enterprise should be magnified by schools in the private sector. Why should independent schools or parochial schools extend the welfare state, to make all of life "secular"? The larger the field reserved to private enterprise and voluntary organizations such as churches, the better off they will be.

3. "Taxation without representation is tyranny." Representatives of taxpayers must control expenditures of tax funds. A parent who sends his child to an independent school is still a citizen who can vote to change what the public school is doing. The taxpayer must be in like position with respect to *any* school using tax funds. Is the parochial school which asks for tax money ready to yield, to representatives of the taxpayers, the title to the building, the choice of textbooks, the selection of teachers?

Citizens have a right to equal educational opportunity. This equal opportunity should be available to all children of all the people. The state provides this equal opportunity for all the children in the public schools. Another right of the citizen in the United States is to choose the kind of education which shall be given his children. The citizen can choose to send children to the public school; he can choose to send them elsewhere. His choice in the latter case does not carry with it any mandate on public funds to pursue his private purpose. Freedom of religion is a citizen's right; his personal choice governs, but not at the taxpayer's expense.

Freedom of religion was designed for the good of religion as well as the good of political government. The efficacy of our system is indicated by the health of religious institutions in this country. Compare the vitality of religion in this country with the health of religion in any country where attempts are made to combine religion with the compulsory power of the state!

4. If tax funds were given to one church for its teaching of religion, then discrimination would exist unless such funds were made available for all. Church-related schools exist, their sponsors usually say, for reasons of religion. If tax funds are made available for churches teaching religion through full-time day schools, discrimination may exist if tax funds are not made equally available for churches which choose to teach religion in Sunday schools, vacation Bible schools, released time. So long as tax funds are made available to none, no one is discriminated against by refusal of tax funds for that purpose. No "discrimination" exists against persons for reasons of religion in the public schools. Children of all religions are freely welcomed and given the same instruction.

5. Are parents who choose not to send their children to public schools doubly taxed? The state certainly taxes its people for public schools; do the churches tax for parochial schools? The parent's choice is supposed to rule; can you have it both ways?

If tax funds are given to aid children in church-related schools, certainly people of other churches —or no church—would have a right to complain of "double taxation"!

The state taxes citizens for public schools. Bachelors, old maids, childless couples, grandparents, all pay taxes for support of public schools. They get benefits as citizens from such taxes. Such taxes help prepare youth for participation in political life as voters, for the defense of the country as soldiers. All citizens, church members or not, get such benefits from payment of taxes for public schools. Parents who choose to send children to non-public schools do not thereby abdicate from such responsibilities and benefits as citizens, and so cannot complain that they are more unfairly taxed than are bachelors and childless couples. Good religion will insist that such responsibilities of citizenship in the state be maintained.

Constitutionality Not the Question

Thus far, this article has not mentioned constitutionality. Constitutions can be changed. Our arguments should be directed to the reasons which led to laws and constitutional phrases. So far, this article has not mentioned any church by name. To me, the question should not be phrased in Protestant-Catholic terms, for Orthodox Jews and some Protestants operating church-related schools join with some Roman Catholics in the United States in asking for bus transportation and for tax money for parochial school buildings and teachers.

The reasons why tax funds are denied any religion must be persuasive to persons of all religions. Consider the consequences when it is

The U. S. Supreme Court has decided not to interfere with the right of Catholic pupils in Connecticut to ride school buses at public expense. A Connecticut law enacted in 1957 gives communities the right, after referenda, to furnish free bus service to pupils in non-profit private schools. Many Connecticut citizens object. They have been waging a legal battle to strike the law from the statute books. But on Monday, February 20, the Supreme Court dismissed an appeal that challenged the law.

known that tax funds are available to churches in fulfillment of their purposes:

1. There will be sectarian rivalry to get feet into the public trough. In many states and cities there will be denominational political parties, church-selected candidates. The heat engendered by the recent discussions of federal aid will be as nothing to what we must expect as the issues are carried down to the precinct levels.

2. There will be in our religiously pluralistic society many school systems and it will be even more difficult to provide equal educational opportunity than it is now.

Why do persons attend parochial schools? Such schools are operated by Roman Catholics, Missouri Synod Lutherans, Episcopalians, Seventh Day Adventists, Quakers. Parents of one denomination do not often choose another. They cannot be equated. Each serves the purposes of its sponsors, which vary widely. In each case, the primary reason is a private one, and not a public purpose.

Yes, all teach reading, writing, arithmetic. In each, a child may meet compulsory school laws, prepare for economic competence, for military service. It would be nice if we could sort out the proportion of time devoted to the public purpose, the proportion to the private purpose. How can you? The religious purpose pervades all instruction in these schools. The compulsory power of the state to collect taxes should not be a tool of the religious purpose of the citizen. So tax money should not convey the child to the church-related independent school.

Every citizen is entitled to police protection. If he likes, he can hire at his own expense a private police force. If you like not the public park, help yourself to a private park at your own expense. You can go swimming on a private beach, if you will pay for it. You may build a private road if the public highway is not adequate for your purpose—at your own expense. So the citizen who chooses not to use the public school should pay the cost of his chosen school and for transportation thereto.

► Americans are not as carefree in their spending as they might pretend to their neighbors and friends, according to John K. Diederichs, director of techno-economics research at the Armour Research Foundation in Chicago.

"People begin to show conscious concern about money, on the average, when an item costs more than $1.25," Diederichs says. "In 1933 this concern point was five cents."

In addition, the urge to consider credit buying is roughly 100 times the cash impulse level, or about $125.

What does the consumer spend his dollar for? Says Diederichs: autos and repair parts, 5.2¢; personal services, 1.6¢; gasoline and oil, 3.3¢; food and beverages, 22.8¢; furniture and household equipment, 5.3¢; transportation, 2.9¢; household operations, 5.4¢; savings, 7.4¢; housing, 12¢; clothing and shoes, 8¢; recreation, 1.7¢. On the increase: auto expenditures, personal services (doctors, dentists, barbers) and, remarkably, savings.

► In the last five years, the number of community colleges has risen from 483 to 677 and the total of students in them from 335,000 to nearly one million.

► "In transportation, our thinking is too often bound to the school bus. From mountainside and from inaccessible island, helicopters could be used. The days pupils miss due to poor weather conditions may be more than offset by the broader educational opportunities afforded by a comprehensive secondary school."

The speaker is Howard R. Jones of the University of Michigan, addressing the AASA at St. Louis in March. He emphasized that instead of relying on palliatives such as correspondence courses or even educational TV, school people should devote their energy to re-forming school districts so that there is a sufficient population base and an adequate fiscal capacity to operate high schools of reasonable size.

More than half of the high schools of America have fewer than 200 pupils, and half of these have fewer than 100. There are more than 2,500 with fewer than fifty.

► "Any subject can be taught effectively in some intellectually honest form to any child at any stage of development."

—*Jerome S. Bruner*, Ohio State University

Democracy Is Not for Children

How do children acquire a reasonably accurate concept of democracy if not by practicing it? Here a teacher traces the pitfalls of "democracy" in the classroom.

By DONALD W. ROBINSON

WHAT is the proper place of democracy in the classroom? If it is partly true that democracy is not for children, surely it is equally true that children must learn democracy. While some schools have succeeded with democratic education, others have succeeded in fostering arrogant selfishness and inconsiderateness in the name of democratic rights.

Several misconceptions threaten the efforts of some of our schools to inculcate democratic concepts, and worse, they sometimes lead to monstrous perversions of the democratic ideal.

The first error is the assumption that democracy can be established in the classroom. The first principle of democracy is the selection of leaders by the members of the group. Obviously, the leader in the classroom is imposed upon children who can have no voice in the selection.

Student officers can, of course, be elected. And they can operate under the watchful eye of a benign dictator. But the ultimate authority is an arbitrary adult authority who does not represent the students' genuine desires. The experience of going through the motions of self-government under the surveillance of a teacher who is responsible for the all-important report card grades is not designed to develop independent thinking and acting in the embryonic citizen, no matter how friendly and permissive the teacher may be. While this experience may develop all kinds of civic virtues, it should not be called democracy unless the teacher really abdicates her authority and the students assume full responsibility for their decisions.

A second distortion of the democratic concept results from inevitable simplifications of a complex political theory. Effective democracy requires the cooperative action of mature, independent, intelligent people who know how to make judgments, to compromise, and to participate in the execution of a policy even while they work for its change. This requires a kind of adulthood that many people never achieve and that almost none can achieve during childhood or adolescence. The very difficulty of self-government that demands an early practice to perfect it should at the same time alert us to the dangers of calling the children's preliminary efforts by the same name as the adult practice.

When a child learns to add figures we do not call him a mathematician. When he learns a few dates and facts of history we do not let him think he is a historian. Why should we allow him to think that conducting a class vote under the supervision of the teacher is democracy? It is a lesson in democracy, nothing more. Great damage results from allowing students year after year to associate the word democracy with an experience which is considerably less than democracy.

Although the gradual assumption by the child of increasing areas of responsibility is essential, the teacher must determine those areas. Almost by definition, a child is not equipped to make judgments about the areas of responsibility he is capable of assuming. Our error lies in the indiscriminate use of the word democracy, so that every time the child is allowed to make a decision for himself he is told that this is democractic.

Having the child help to decide what he will eat for lunch or which of two books he will read or what game he will play can be excellent training, but it has virtually no relation to democracy. The use of this word in a wrong context has done much to subvert the true meaning and to weaken the practice of democracy.

Another common error is the use of the phrase, "We must all follow the majority rule; that is the democratic way." The advice is technically correct but can result in serious misconceptions, because the child is too immature to understand the difference between obeying and agreeing.

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The child must obey the rule that has been established by the teacher, whether or not pupils were consulted in the making of the decision. In a wholesome democratic setting the child should be encouraged to maintain his dissident views, express them, and work for their adoption, even while he obeys the distasteful majority rule. Because this part of the democratic concept is usually omitted from the classroom experience, the child receives a false, other-directed notion that weakens his character and pushes him one step closer to becoming a mass conformist, conditioned to accept what the majoriy approves.

Too often the child learns in school to equate democracy with two ideas: doing what you like if it apparently hurts no one else and following the will of the majority. Granted that these concepts are not inconsistent with a true democratic ideal, by themselves they are tragically insufficient and tend to drag democracy down to its lowest common denominator.

Still another peril lies in attempting to apply majority rule on inappropriate occasions. Democracy's toughest problem will always be the day-to-day decisions as to when the people should be consulted and when the people's representative should act on his own judgment, expert or not. Children are frequently asked to express a preference, after which the will of the majority is imposed on all in the name of democracy when the decision should have been made by each individual for himself or else by the teacher on the basis of knowledge or experience. Giving a student some leeway or option in his work assignment to provide for individual differences is reasonable. Having a class assignment determined by majority vote makes very little sense and distorts the nature of democracy. We would like to forget the more ludicrous examples, such as the class that was asked to decide by democratic vote where Alaska is located.

One more weakness in the attempt of some schools to provide experience in democratic living is the well-known temptation to emphasize rights far more than responsibilities, a situation which leads to the anarchic or beat attitude expressed in such statements as, "I have the democratic right to do what I want and I want to do nothing. I'm not interfering with anybody else."

A more realistic approach for the schools might be to stress that democracy does not mean freedom as much as it means responsibility. Dictatorship means freedom. In a dictatorship the citizen has no need to think or to assume responsibility. The boss takes care of everything and the citizen needs only to do what he is told. Above all, students should be reminded that in a democracy agreement isn't necessary; participation is.

Some of the pitfalls, then, lie in assuming that a truly democratic classroom can be established, oversimplifying the concept of democracy, encouraging agreement with the majority, applying the voting procedure at inappropriate times, and emphasizing rights out of all proportion to responsibilities.

Yes, students should learn some democracy in school. They cannot learn it just by learning words. They must learn as much as possible by democratic experiences. But these experiences had better be carefully defined and properly executed. To a degree that is appropriate for the age group and commensurate with the academic responsibilities of the school, it had better be true democracy, with all of the rigors and responsibilities that entails, or the blessings of freedom will soon become tales told by the aging, tales of a wonderful past.

Guides To Foreign Scholarships

► The Institute of International Education has just released two comprehensive guides containing full information on international scholarships. Titled *Handbook on International Study: For Foreign Nationals* and *Handbook on International Study: For U. S. Nationals,* the books are useful to college and university personnel, student advisers, and libraries.

The handbooks sell for $3 separately and $5 in a set of two. Address the Institute of International Education, 1 East 67th St., New York City.

Are Chinese Teachers Good Reds?

► Despite constant stress on political qualifications for teachers in Communist China, there is still doubt whether teachers constitute a group firmly loyal to the regime, according to *Teacher Training in Communist China,* one of the studies in comparative education produced by the U. S. Office of Education.

"Teachers are traditionally considered as a part of China's intelligentsia," the bulletin reports. "Despite all the emphasis on thought reform, there are many indications that this group has managed to conform outwardly without actually submitting."

No More Pencils, No More Books . . .

"Ye who listen with credulity to the whispers of fancy, and pursue with eagerness the phantoms of hope; who expect that age will perform the promises of youth, and that the deficiencies of the present day will be supplied by the morrow: attend . . . "

—Rasselas

By SAMUEL E. PISARO and H. GARDNER EMMERSON

NO more pencils, no more books, no more teachers' dirty looks."

Generations of children have chanted this jingle with traditional, spoofing disdain of schools, schoolmarms, and "book larnin," little realizing the prophetic import of their verse. Pencils and books may not be mourned, but the tragedy of "scientific progress" soon to be foisted on school children is apt to be less palatable to the sentimentalists among us. Yes, the teacher and her classroom are soon to give way to fruits of technology in the form of teaching machines.

To bring the picture more sharply in focus, let's take a walk with Billy as he enters the classroom of the future for his space-age education.

A moving corridor carries Billy to his classroom, where he steps into a doorway mounted with an array of light and heat-sensitive cells which record his attendance, check his health, receive and record his milk money, and file his absence excuse (punched on the IBM card by his mother).

He has a smile and an apple for his technician as he is fastened into his seat, mounted on a moving disc. The well-trained technician (she "interned" at IBM) reviews Billy's arithmetic progress chart as his disc is propelled to Station 76. As the headphones are adjusted, the technician notes that Billy left off with "7 plus 2" yesterday. A push of a button on the pedagometer activates the proper tape recording, synchronizing it with the "7 plus 3" film, which projects itself on the screen in Billy's cubicle.

Heeding the recorded directions, our future "space-medico" (his future is already determined by the electronic guidance machine) punches his lesson on the card in front of him. His responses are automatically corrected as he proceeds through the "canned" experience.

Billy's individualized curriculum continues. The proper spelling and reading lessons are fed to him. When impulses picked up through the seat indicate fatigue, the recordings and films temporarily cease, the learner's chair tilts to a reclining position, and vibrations which began automatically cease after electrical impulses evidence the learner's physiological readiness to continue.

IF the above proceedings sound outlandish and bear no relation to the schools of today or the little red schoolhouse of not-so-long-ago, please recall that components for all of the above devices are already in existence. American businessmen have for a decade employed electronic wizards to perform similar tasks. Turning these instruments to purposes of public education is no longer even a pioneering venture. Educators in all parts of the country are experimenting with teaching machines. As yet, the applications have been scattered and only in a few instances are they utilized outside of the laboratory situation. The true beachhead of educational technology will be established with the construction of the first automated school.

What will the new look entail? Fewer schools, with radically different design, will be needed. The familiar desk and blackboard will be gone. Larger and fewer classrooms will be needed, with one technician handling the instruction of groups several times the size of even an overcrowded classroom of today. If you step into tomorrow's classroom, in fantasy, you will be reminded more of a factory or laboratory than of a schoolroom by today's standards.

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The cost? Big, of course. But the sum spent on machines will be partially offset by savings on teachers' salaries (thus eliminating the present farce of so many being paid so little). Educationists won't be needed in the actual schoolroom. Most of those trained in learning theory (they'll get a liberal amount of engineering too) will be employed as advisers in the preparation of the million-plus miles of "lessons" needed by the hungry teaching machines. Additional personnel will be employed to keep the machines in working order. Teachers may well rush to join their teachers' unions, for surely the teacher shortage of today will be over-solved, placing thousands of trained professionals in a state of technological unemployment.

"Grade one" or "grade eight" will no longer be appropriate labels for hurdles in the schooling process. Children will remain at home or attend pre-laboratory classes until they are mature enough for the automated classroom. "Readiness" will need to be re-defined. Adequate physical coordination and appropriate experiences in card-punching and button-pushing will be prerequisites for matriculation in the controlled and accelerated curriculum.

As Billy comes home from his half-day at school (authorities claim that learning time will be halved), he will be free at last from the eternal parental query, "What did you do in school today?" His parents will realize that yesterday, today, and tomorrow are all alike in the automated school.

As our present generation looks on the blacksmith and lamplighter as curios from history, so our grandchildren may well ask, "Daddy, what is a teacher?"

Shocking? Preposterous? Impossible? Contemplation of the above scene may well upset you (or maybe please you) but the *possibility* of such a turn of events can hardly be denied. The exact layout of the future classroom and the amount and types of equipment may vary from the above description, but mechanization of certain tasks of the teacher is already a discernible trend. If you don't think so, just visit one of the current American Association of School Administrators' equipment exhibits and compare it with those of the Fifties.

What or who will determine the rapidity or extent of educational automation? Educators? Laymen? Equipment makers?

Educators whose specialty is instructional materials and who are leading the way in the development of teaching machines deny that the teacher can be replaced. But the issue here is not *can* or *should*. It is, *will* the teacher be replaced? The automation pioneers view teaching machines as another tool, an aid to the professional, human teacher. Classroom teachers, constituting the bulk of the profession, have an understandable emotional involvement here which results in skepticism and extreme conservativism among the profession at large.

But non-educationists whose pressure for lower school taxes grows by the year may see in the use of teaching machines the financial advantages which accrue when one teacher "handles" a larger group of students. At the same time, however, other elements oppose the replacement of teachers on purely sentimental ground. Recently-stimulated public interest in our schools suggests that any drastic educational innovation will be accompanied by the democratic activities of discussion and lobbying. Any overzealous educator, admiral, or manufacturer of teaching machines will thus be prevented from stampeding the schools into wholesale adoption of untried instruments.

Reassuring evidence on the acceptance and use of new teaching instruments can be gleaned from the current educational scene by observing the adaptation of television to classroom instruction. After initially ruffling the feathers of teachers with threat, educational television is being tried and used by a large number of schools, but an "experimental" attitude prevails in most quarters. It should allay any fears of a too-rapid transition to the brave new world of automated education.

Add to the above discussion the myriad philosophical and psychological arguments and we can safely predict that the teacher is here to stay—for several years at least.

► Vacation courses, study tours, and work camps in over seventy-five countries running through the alphabet from Argentina to Yugoslavia are listed in the thirteenth edition of *Vacations Abroad* just published by UNESCO. The book may be obtained for $1.25 from UNESCO, Place de Fontenoy, Paris, 7e.

► "We have no distinctively Christian sport in a predominantly Christian culture. We need a new sport in which victory is measured by the degree to which one contributes to the restoration and perfection of the opposition."

—Glenn A. Olds, president, Springfield College, Mass.

The Expendable Carnegie Unit

By SIDNEY L. BESVINICK

ONCE upon a time a newly-wed young woman entered a butcher shop and ordered a ham. When the butcher showed it to her, she requested that he cut off a four-inch piece and wrap the two sections for her. Surprised, he asked why. The housewife said she didn't know but that her mother and grandmother had always had the butcher do this.

The question bothered the young lady all the way home and she determined to find the answer. She asked her mother, who was unable to explain, except to say *her* mother had had the hams she ordered cut that way. Finally the woman called her grandmother and explained what had happened. The old lady laughed and said, "Land sakes! When your grandfather and I were first married we used to eat ham often but the pot we used wasn't big enough to hold a whole ham, so I used to have the butcher cut off a four-inch piece on the shank end."

Is the Carnegie unit a four-inch piece of ham? Are we using an outmoded device for measuring high-school achievement? A glance at the origin of the Carnegie unit suggests that its use today is as ridiculous as cutting the ham.

In 1905 Andrew Carnegie set up a fund for the retirement of college professors. The plan was an attractive one and many institutions wished to avail themselves of its benefits. In fact, so many secondary schools which were called "colleges" requested membership that the fund was swamped. The fund's trustees had to differentiate among the applicants and searched for a sound criterion. They decided to use the "standard unit."

For an institution to be eligible to participate in the retirement system, its beginning students had to present a credential showing they had already completed a minimum of fourteen standard units of school work. A unit was awarded for regular attendance in a course that met one class period per day, five days per week, thirty-six weeks per year. This unit eventually became the Carnegie unit that we use today in a complicated system of academic bookkeeping to determine fitness for high-school graduation and college admission.

Certainly there are advantages to the unit. It is a neat way for comparing, superficially, the backgrounds of two students from Montana and Virginia. Its universal acceptance enhances its respectability. It is a convenient yardstick for measuring depth and breadth of a high-school graduate's program.

The disadvantages, however, far outweigh these advantages. The unit is inadequate and inaccurate as a measure of scholastic attainment. It is essentially a year-long record of quantitative exposure to a given discipline and reflects nothing of quality. It becomes a Procrustean bed for the curriculum—some courses have to be "padded" to cover one year while others have to be pared to the bone to fit within the prescribed thirty-six week limit. The unit's use leads to regimentation of the program and restricts curricular experimentation. Since colleges rely so heavily upon it for determining the acceptability of high-school graduates, no course may even be considered for high school use unless it covers a unit's worth of the curriculum.

Removal of this one roadblock opens the way to a great number of program variations. Students could take six, seven, or even eight subjects, with some meeting two or three times a week, such as typing or vocabulary study. Others might well meet for seven or eight hours a week, such as laboratory science courses. Schools could experiment with trimester or all-year programs. Organizational plans could be tried where it would be unnecessary for students to be in steady attendance in classes all day every day. Both the core curriculum and the Trump plan would find release from the pressure and compulsion of the Carnegie unit especially advantageous.

High-school principals and college registrars, however, will still need a measure for graduation and admission if the Carnegie unit is abandoned. Why not use the term "hour"? An accurate account of the number of hours of contact a student has with a given subject might be more mean-

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ingful than one standard unit. In this manner a student might complete a year with the following:

American History—180 hours
American Literature—100 hours
Grammar and Vocabulary—80 hours
Conversational French—220 hours
Chemistry—250 hours
Typing—70 hours
Driver Training—60 hours
Physical Education—60 hours
Supervised Reading—60 hours

This plan would still permit high schools to compute class rankings, students to see where they stand, and colleges to set minimal entrance requirements. In addition, the school could offer a greater variety of courses and achieve a better balance between general and special interest education.

Schools and learners would then have greater curricular freedom while still providing statistical security for registrars and admissions officers. Perhaps "hour" is not the term to use, but some new symbol which can replace that "four-inch piece of ham," the Carnegie unit, is desperately needed. After all, a more rational device ought to be available for measuring high-school achievement than that used to determine professorial eligibility for a pension plan.

Ignorance About the Schools Is Monumental; Here's How To Combat It

► AP Education Writer G. K. Hodenfield has presented a three-part newspaper report of voter ignorance, complacency, and downright viciousness concerning the public schools. Says Hodenfield: "There are three main threats to every school bond issue, every school tax levy placed on the ballot in this country: apathy, ignorance, and resistance to taxes."

Hodenfield interviewed citizens in St. Louis, where school issues have failed repeatedly, and at fast-growing Parma, Ohio, where favorable majorities have gone as high as 89.9 per cent but where last year a bond issue had to be submitted a second time to get voter approval. He called the problems in these communities typical.

The following are typical comments:

A woman who didn't vote: "I'm busy. I've got four kids to look after. And what difference does it make? We'll always have schools."

A man: "I don't believe all this stuff about our schools being overcrowded. I think they're just wasting the taxpayer's money."

Housewife: "It's criminal the way they have raised our property taxes." (But she didn't know whether she was paying nearer $100 or $1,000.)

Woman: "I can't support the Catholic schools and the public schools too. They'll just have to get their money somewhere else."

Housewife: "I'm darned if I want to pay any more. Let the government do it; they've got all the money anyway."

Hodenfield's series suggests, according to *Trends* (a publication of the National School Public Relations Association) that the schools may be reaping a crop of nettles from long-time educator insensitivity to the need for greater stress on teaching about the public schools in the curriculum. Top quality national materials are scarce, says *Trends*, but notes that Century Schoolbook Press, San Francisco, has just published a four-unit series of biographies of famous American educators.

Theral Herrick has called attention to what is perhaps a model for locally-developed materials in this area. It is *Learning More About Schools in School*, published by the Kalamazoo, Mich., board of education. With the help of Robert Koopman of the Michigan Department of Public Instruction, a dozen Kalamazoo teachers and some of the board members prepared copy for the book. Some of it was based on results of applying locally the inventory of public opinion about the schools developed by Harold Hand and his associates at the University of Illinois.

Mr. Herrick, who is Kalamazoo director of instruction and guidance, can supply copies of the book for $2.75 each.

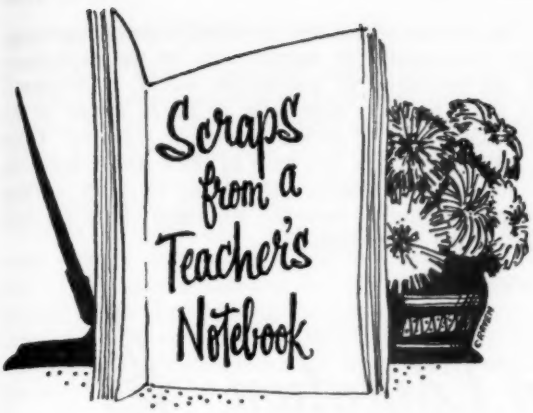
Vested Interest and Community Colleges

► Only four states of the U. S. do not have public-supported community colleges. Ohio is one of them.

In a forthright editorial in the February *Educational Research Bulletin*, published by the Ohio State University College of Education, Editor R. H. Eckelberry chided representatives of the state universities for actively opposing creation of community colleges. His article is titled "Selfish and Therefore Shortsighted." He thinks there is a determined effort on the part of the Inter-University Council of Ohio to block establishment of community colleges by confining new higher education facilities to university branches.* Eckelberry calls attention to the deficiencies of these branches, despite the university label and regional accreditation.

Pushing community college development are several state groups, including the Ohio Education Association and industry representatives, who have no quarrel with the university branches but feel the need for more highly trained technicians and specialists, a job for which community colleges are particularly suited.

* Denied in the April *Bulletin* by Miami University President J. D. Millett.



By DON ROBINSON

NEARLY all young people are eager to learn. They are not all interested in learning the same things, or in learning the same way, or in being tyrannized by dull, impatient adults. Nor should they be completely subservient to the whims of prodding, unhappy teachers who simply compel uniformity. Education is a very personal thing.

Which is not in the least to suggest that pupils' whims should be substituted for teachers' whims. Whim should be discarded in favor of mature understanding and firm but flexible alternations of freedom and discipline.

* * *

A baffling paradox exists in accommodating assignments and standards to the abilities and interests of students, since so many students will invariably select the easiest alternative, to their own detriment. Permitting a student to accept courses and assignments too easy for him is just as damaging as requiring him to take subjects too difficult for him.

* * *

There is far greater danger of having teachers overtrained in content than in methods. A Ph.D. in history usually has great difficulty in remaining excited over teaching the basic principles that he had mastered in four years of college with a history major. If he cares about teaching he can never know enough about how to teach that history and impart to all students a yearning for the learning of history. There is a limit to the amount of graduate history he can apply to the high-school teaching situation. There is no limit to the improved skills he can apply to the teaching of that history.

* * *

Young people need the leadership of teachers who will set standards, so they will know what is expected. They need the assurance of belonging, of knowing they are doing what is right and proper, of knowing their behavior is acceptable.

If they are denied the opportunity to "belong" to the right standards because the teacher provides no standards, they will turn completely to their peers. The peer group has few standards other than those of childhood, so the leadership is a highly personal leadership of the most aggressive, the most articulate and attractive, with little regard to other standards of excellence. "Belonging" to this group becomes other-directedness, purely a matter of adapting to the goal of being accepted rather than adapting oneself to the acceptance of standards. If a teacher establishes standards, students will either conform or rebel. In either case they have a standard, a criterion, against which to judge their own behavior.

* * *

Teachers require constant reassurance of their competence as adults. Consequently, the togetherness of teacher groups, the frequency of their meetings and conventions, is explainable on the basis of their need to have professional contact with adults. This need is normally met in other professions by day to day work with adults on the job.

* * *

As Max Lerner reminds us, the highest delinquency areas are frequently those areas where the formal religious disciplines are the most rigid.

* * *

The traditional method of teaching results in thinking in a box, which has advantages and disadvantages. Communication is easiest where everyone shares a common cultural background and recognizes similar meanings for symbols. But since all are thoroughly grounded in the common connotations, there is a tendency to think in similar fashion, within the framework of the given pattern. It is commonly recognized that church schools have tended to offer the most rigorously disciplined academic training and have produced fewer than their share of inventive or creative scholars.

* * *

Suppose you taught a high-school physics course in which seven students of a hundred demonstrated 90 per cent mastery or better in the most comprehensive examination and you assigned them final grades of A. Ten students attained scores below 60 per cent and you called them failures.

Last summer you attended a workshop where you were introduced to dazzling new techniques for the presentation of your material, including electronic teaching machines, televised lectures, and group teaching—all of which your school promptly adopted.

This year, using the same comprehensive examinations, thirty of your 100 students score better than 90 per cent and none scores lower than 60 per cent. Do you give 30 A's and no F's?

* * *

If we believe that learning takes place largely by imitation and if we want students to become mature, we had better have teachers who are mature.

* * *

If the family has done a satisfactory job of disciplining the child, the school is free to perform its job of teaching. Usually, though not always, capable students are well-disciplined students, which means free of disturbing emotional problems.

* * *

Why deride a person for harmless mannerisms? Mannerisms are a part of personality and when we screen them out we go one step closer to dreary uniformity.

* * *

The emotionally crippled should not be accepted as teachers. The emotionally limited, those with wholesome personalities who are yet not quite mature, frequently make the best teachers.

The person whose ego is limited, who cannot compete successfully or comfortably in the hurly-burly of the industrial or mercantile world, is frequently an ideal teacher, especially if he is aware of his limitations and so avoids becoming a martyr. Other types of neurotics, unaware of their own limitations, unable to face reality, and unable to relate to other people (including neurotic students), have no business in the classroom.

Keeping Abreast in Education

Field Study of European Education

► Mr. Superintendent, does your board believe that European education is superior to American? Can you explain to its members the main features of educational systems of the major European countries? Do they know that vast educational reforms are occurring or are under debate in most of these nations? What is the direction of these reforms?

The pragmatic American likes to see for himself, and Phi Delta Kappa, in cooperation with two other large associations, is providing an opportunity for administrators and school board members to do just that.

Applications are now being received by Harold V. Webb, acting executive director, National School Boards Association, for participation in a seminar and field study on "Reforms and Policy-Making in European Education." Some sixty schoolmen and board members, including college and university administrators and trustees, will leave New York by jet on Friday midnight, November 10, for four days in London, three in Paris, three in Hamburg, three in Stockholm, and three in Moscow. A series of seminars and school visits designed specifically for such a group has been set up in these cities.

Especially attractive excursion plane fares and the cooperation of education officials in each of the countries to be visited make this a very low-cost undertaking. Ordinarily the New York to Moscow flight alone costs $800, but the cost of the entire seminar is only $1,000, including everything except certain of the meals (estimated to add $25 to the total but varying with individual tastes), passports and visa fees, and the travel to and from New York. Persons actively engaged in education may claim a deduction of their expenses for income tax purposes because of the nature of the project sponsorship.

Wives are welcome to join the group. For those wishing to visit other cities in Europe on the way home, stops can be arranged for a small extra ticketing charge.

Joining with Phi Delta Kappa in sponsorship of the seminar are the National School Boards Association and the Comparative Education Society. Representatives of the three organizations will serve as directors: Dr. Webb of the NSBA; Gerald Read, secretary-treasurer of the Comparative Education Society; and Stanley Elam, editor of PDK publications.

Among sessions already announced by Read are these: London—"Education Reform of 1944," Professor Brian Holmes, University of London Institute of Education, chairman. Paris—"DeGaulle's Reform in Education," Professor R. A. V. Mallet, Laboratoire de Psychologie Clinicue, University de Paris, chairman. Hamburg—"The Rahmen Plan and the Bremen Plan," Professor G. Hausmann, Department of Pedagogy, University of Hamburg, chairman. Stockholm—"Education Reform of 1950," Professor Thorsten Husen, Institute of Educational Research, University of Stockholm, chairman. Moscow—"Khrushchev's Reforms in Education," I. Grivkov, president, Trade Union of Educational and Scientific Workers of the USSR, chairman.

Among resources for the group will be a special issue of the PHI DELTA KAPPAN on educational reforms in Europe, off the press just before the group leaves New York. The issue has been planned by the Phi Delta Kappa Commission on International Education.

Inquiries and requests for application forms should be sent to Dr. Webb, National School Boards Association, 1940 Sheridan Road, Evanston, Ill.

To date (April 18), some twenty-two persons have already made application for the seminar-field study.

Correction on USOE Seminar

► Contrary to implications of an announcement appearing on page 327 of the April KAPPAN, attendance at the August seminar on mental retardation sponsored by the Cooperative Research Program, U. S. Office of Education, is by invitation only. Our apologies.

Aha! So This Is PLATO

► PLATO (for Programed Logic for Automatic Teaching Operations) was given a three-day demonstration before 100 University of Illinois faculty members at the President's Faculty Conference this spring at Allerton Park, university conference center thirty miles from the campus.

PLATO is based on a high speed electronic computer (Illiac), television, and a new feedback machine. Instructional material fed into the computer, located in the Engineering Research Laboratory at Urbana, was transmitted by WILL-TV, the university's station, and received on a television screen at Allerton House. The "student" at Allerton studied the assignment in part by punching a specially designed keyboard connected to Illiac by telephone.

Uniqueness of this hookup is provision of the student's immediate response to a situation posed by the computer, which in turn records the nature of the answer, prints this information, then immediately flashes another problem on the screen.

If the student is unable to give the correct answer, he asks Illiac for help by pushing the "help" button. The machine then transmits supplementary information and the student tries again.

When he understands, he pushes the "Aha" button and proceeds to the next point in the lesson.

At the same time, the computer is learning about the student from his behavior and recording this information. This diagnosis of each learner's performance makes revision of course material a much easier and faster job for the teacher.

The system also aids in increasing knowledge about educational psychology, because for the first time psychologists can systematically control variables that affect learning speed.

One of Ten Is Well Informed

► A report that depresses college public relations officials has been published by *Public Relations Ideas*, a newsletter distributed by the Public Relations Committee of the AACTE.

The University of Michigan Survey Research Center reports that only one-third of the adults in the state can recall the names of at least six Michigan colleges or universities. (There are about forty-five.) And fewer than two-thirds of this "well-informed" group realize that great enrollment increases are inevitable for Michigan higher education in the years immediately ahead. Finally, fewer than one-half of the last group could also name one field of university research. It all boils down to the fact that only one adult in ten can be regarded as well-informed by criteria acceptable to public relations people.

Emphasis on Teacher Education

► The Council for the Advancement of Small Colleges has fifty-nine institutional members. Thirty-eight of these offer major courses in education. Three offer engineering, eight train medical technicians, and six graduate nurses.

Testing for Creativity

► Highly creative children are often disparaged and called "wild, silly, or crazy" by teachers and some other children, says E. Paul Torrance, director of the University of Minnesota Bureau of Educational Research.

Teachers and classmates are unable to assess the worth of creative ideas. Highly creative children tend to be psychologically distant from teachers, parents, and peers, according to Torrance.

The Minnesota research bureau uses ask-and-guess tests to assess creative abilities. In these, the student is shown a picture. First, he is asked to raise any question that cannot be answered by looking at the picture, and then to guess or make hypotheses about what he sees.

For the second or guess part, the test may take the form of showing the child a toy and asking him how it may be improved.

The bureau is studying comparable groups of children in Australia, Norway, Canada, Germany, India, and Samoa. From these, researchers can investigate influences of culture on creative thinking.

Suggestions received in Samoa were of special interest, Torrance notes. The first Westerners on the island were members of the London Protestant Society, and they tried hard to impose Western modes of dress on the natives. So well did they succeed that when the Minnesota researchers ask a Samoan child how a toy animal can be improved, he often replies that the animal should be clothed.

How To Be Very, Very Popular

► Reports now arriving at Phi Delta Kappa headquarters suggest that state legislatures this year were more than usually reluctant to vote money for schools. In several states (for example, Iowa and Wyoming), gubernatorial candidates won last fall on platforms promising veto of any legislation which would result in tax increases.

Wyoming became "infamous" (to quote Chester Bowen, state education association executive secretary) by repealing an enabling act which allowed the schools to accept NDEA funds, thereby sacrificing $500,000 on the altar of local control. At the same time, the Wyoming legislature refused to grant local boards of education authority to increase district levies to meet increased school costs.

Test of Teacher Training Methods

► Twenty films have been shot at the University High School in Urbana, Illinois, to demonstrate the "discovery" method of teaching developed by the University of Illinois Committee on School Mathematics. They are being tested to learn whether they are more effective than current four-week training sessions in preparing teachers to use the method.

The films were taken by the National Educational Television and Radio Center with government (NDEA) financing.

Birds Learn To Read Without Teachers . . .

► "A sign on the paved parking area of Silver Strand State Park, which is between San Diego bay and the ocean, reads: 'Seagulls—Breaking clamshells on pavement is prohibited.' It was put up on order of a district superintendent of parks. The seagulls had been dropping clams on the pavement to break the shells, so they could eat the meat. Lewis Myer, assistant supervisor, insists fewer clams have been dropped since the sign went up."

—*Bergen Record*

. . . But So Can Gifted Children

► Gifted children often learn to read before they enter school, according to Irving H. Anderson, University of Michigan.

One set of statistics, based on a sample of almost 1,500 children with IQ's of 140 or better, reveals that two per cent learn to read by the age of three, six per cent by the age of four, and 20 per cent by the age of five.

Another study has shown that about one per cent of first grade entrants have already learned to read without benefit of formal instructions. Of these children, the vast majority are in the gifted category.

For the most part, says Anderson, children who learn to read before they enter school have not had home instruction, but have learned to read by themselves by becoming interested in what printed words say.

Such children need no "teaching," but only someone to tell them what new words are. They quickly learn to spot words on this basis wherever they see them and are reading before anyone is aware of what has happened.

Anderson says children with superior mental abilities also tend to learn to spell by themselves. "One study has shown that such children can be excused from their spelling lessons and still hold their own in spelling. They discover phonetic elements as a part of learning to identify words," he notes.

Children who learn to read and spell on their own may find themselves in a quandary when they enter the first grade and are introduced to formal reading instruction, says Anderson. Many are well beyond the pre-primer stage, but may be treated like the rest of the class.

"It may be that reading should be introduced earlier to these children," Anderson suggests. "And they might learn to read even better if given earlier instruction." Anderson thinks age-of-entrance laws should be re-examined in the light of evidence that bright children can hold their own academically with older children who are not so bright.

* * *

► "Togetherness" seems to have bloomed and faded, but "Separatelyness" is on the way. The most extreme example of the latter is *The Insider's Newsletter*, published by Cowles Magazines, Inc. It comes in two separate editions, one for men and one for women. Naturally, one is decorated with a blue stripe and one with pink.

Five Millions for Delinquency Research?

► A bill to provide some $5,000,000 for juvenile delinquency research is now under consideration by a U. S. Senate subcommittee investigating the youthful offender problem.

William C. Kvaraceus, professor of education at Boston University, in testifying in favor of its passage, said that while there has been a great deal of writing in connection with juvenile delinquency, writing and research are not synonymous. "Current research in juvenile delinquency and related fields is uneven, uncontrolled, and unscientific," he said.

Kvaraceus, who directed the NEA juvenile delinquency project in 1958-59, said there must also be improvement in practitioner competence in locating, reading, and applying the results of delinquency research.

Kvaraceus told lawmakers further that the Department of Health, Education, and Welfare's Exceptional Children and Youth Section is "woefully under-staffed." He urged appointment of two additional persons to study and advise on "problems involved in helping emotionally disturbed children in and through the schools and on problems of the socially maladjusted and culturally disadvantaged children who constitute a sizeable portion of the delinquency population."

Growing Interest in Comparative Education

► Interest in comparative education is growing rapidly. Evidence of this was a recent Western Regional Comparative Education Conference held at the University of California at Los Angeles, where 350 persons gathered to discuss "Comparative Education: A Crucial Factor in World Affairs." The group voted to hold a second such conference there next year.

The conference was initiated by Dean Howard E. Wilson with the assistance of Wendell P. Jones. The latter, a former president of Zeta Campus Chapter at the University of Chicago, is helping UCLA develop a comparative education program and a center for African studies. This spring he and Lloyd Morrisett visited Africa to investigate, for ICA, the possibility of long-term educational contracts.

The Evils of Teen-Age Marriage

► Almost everything about teen-age marriages is "bad," says Lee G. Burchinal, Iowa State University sociologist. His research shows that 80 per cent of the girls and 43 per cent of the boys drop out of high school after marriage. The young husband who drops out of school has difficulty finding work. The income of the breadwinner ranges from zero to $100 to week, with $62 as an average. Only 33 per cent of the couples under study were able to maintain their own homes; the majority doubled up with their families. Some 55 per cent of the girls regretted their marriage within six months. The divorce rate among teen-age couples is four times as high as for couples in their twenties.

Research Design Lab at Wisconsin

► A new Laboratory of Experimental Design has been created at the University of Wisconsin under the direction of Julian C. Stanley, professor of education and expert on educational research methods. The laboratory is intended to help Wisconsin educators in elementary and secondary schools, relieving them of the need to be expert in design and analysis of experiments they wish to conduct. After getting help with design, schoolmen will conduct the experiment and return to the laboratory for help in data analysis.

Says Stanley: "We are concerned mostly with sequences of experiments on a single problem over a period of time, rather than big 'one-shot' experiments."

Pioneering work began a year ago with Norris Sanders of the Manitowoc schools and teachers of social studies in Manitowoc, Appleton, and Neenah. Eight methods of teaching a day's lessons were compared.

Currently Sanders and Stanley are designing a series of experiments to determine the best way to teach a "Problems of Democracy" course. This research may eventually lead to a body of theory on social studies classroom learning.

In September four graduate students will begin three-year doctoral programs at the university and serve also as part-time interns in the laboratory. They will receive NDEA stipends.

Knowledge as an 'Intramural Sport'

► Knowledge as an "intramural sport" for college students is becoming firmly established at Boston University.

Four-man teams from eight undergrad colleges of the university compete in oral question-and-answer matches covering subjects from ancient history and classic studies to science and current affairs. Started last year, the contests are sponsored by the university's Cosmopolitan Club in the month of March.

Preliminaries, played in the afternoon, are open to student and faculty audiences. The finals are held in the evening and are open to the general public.

According to the student co-chairmen, the General Knowledge Contest is designed to "link student activities more closely with our basic objective in college—learning."

Colleges Contract To Design Fallout Shelters

► Eight colleges in different regions of the U. S. have signed government contracts to conduct workshops for architects and engineers on design of fallout shelters. Such shelters can be incorporated into new home plans for less than one per cent additional cost. They increase chances of survival 100 plus times.

In Russia, the government is constructing thousands of shelters and is steadily expanding its civil defense program on a compulsory basis.

Eurich on Class Size

"Because so much in education depends on it, the first shibboleth that requires critical examination is the fixed teacher-student ratio . . . a half-century of experimental work does not support this fixation in American education. In fact, research places the burden of proof on the proponents of small classes. Students do as well on examinations, and in many cases better, if taught in larger classes *by superior teachers.*" —Alvin C. Eurich, executive director, Ford Foundation

Colleges and the Peace Corps

► A pamphlet titled "Educational Institutions and the Peace Corps" is available upon request from the Director of University Relations, Peace Corps, Washington 25, D. C. The document is divided into four sections, including a statement of general policy, in which the importance of the U. S. community of higher education in the success of the Peace Corps program is emphasized.

Educational institutions may be related to Peace Corps programs in three ways: (1) as responsible agencies for the operation of projects; (2) as agencies for conduct of training programs according to Peace Corps specifications; and (3) in the provision of research and evaluation services.

In general, post-secondary educational institutions —academic, professional, or vocational—are eligible to participate provided they have accredited standing. This includes both public and private institutions.

TEPS Considers Placement Service

► The National Commission on Teacher Education and Professional Standards is considering a teacher education placement-information service for 1961-62.

It has been proposed that the *Journal of Teacher Education* carry announcements of openings in teacher-education institutions and of the availability of personnel for employment.

Persons wishing to learn more about the proposal should write to the *Journal of Teacher Education,* NEA, 1201 Sixteenth St., N.W., Washington 6, D. C., enclosing a self-addressed, stamped envelope.

Studies of the Learning Process

► *The Learning Process,* a new book by Theodore L. Harris, University of Wisconsin, and Wilson E. Schwahn, has just been published by the Oxford University Press. It contains thirty-five studies, mostly experimental in nature, on how people learn. The studies emphasize important types of behavioral change and the functions and problems related to such change in the process of learning.

► "During the past fifteen years the United States government has been continually praising the concept of arms control and continually acting behind the scenes to sabotage any agreement with the Russians on the question." —Saville Davis, managing editor, *Christian Science Monitor*

The Curriculum Maker*

By Clifford E. Winkler
Eastern Illinois University

He was a clever boy, but maladjusted.
He wanted friends, but was mistrusted.

In Latin class he was astute—
Even the teacher thought him cute.

His success became his ultimate delusion
When he drew the asinine conclusion

That Latin should be required of all,
Since only here could he recall

The joys and affirmations
Of human warmth and conversations.

Little successes are dangerous things
When they create curriculum kings.

* Written in response to "For the Birds," April KAPPAN, p. 291.

Correspondence Study for Math Teachers

► Beginning next September, the University of Wisconsin will conduct a directed correspondence study program for 500 secondary school mathematics teachers with grants totaling $50,000 from the National Science Foundation. A course in modern geometry will be offered for 300 Wisconsin teachers and 200 teachers from other states.

A unique program, it will combine advantages of classroom, laboratory, and correspondence study. It is intended for teachers unable to attend resident institutes sponsored by NSF.

Information can be obtained by early fall from Raphael D. Wagner, program director.

New High Schools Ready for Television

► Nearly one-third of new high schools being started this year, excluding those in large metropolitan areas, will have equipment for closed circuit television, according to a survey reported in the April *School Management*. The largest per cent of schools making this provision is found in districts with from 1,200 to 3,000 students. No district with fewer than 600 students, among those surveyed, has plans for closed circuit systems.

Although not reported, perhaps another one-sixth of the schools surveyed are installing sets to pick up broadcasts of commercial or educational TV stations, according to *School Management*.

Coleman Research Reported by USOE

► "Social Climates in High Schools," a summary of research on which James S. Coleman based his March KAPPAN article, "The Competition for Adolescent Energies," is now available as Cooperative Research Monograph No. 4, U. S. Office of Education. Ask the Government Printing Office for it by name. The price is 30¢.

NEA Studies Technological Developments

► An extensive study of "Technological Developments and the Teaching Profession" is now being conducted by the NEA through contract with the U. S. Office of Education under the NDEA.

Planned for completion by mid-1962, the project is directed by James D. Finn, chairman of the Department of Audio-Visual Education and Cinema, University of Southern California, and president of the NEA Department of Audio-Visual Instruction. Lee Campion, formerly audio-visual director for the St. Louis, Missouri, County Schools and more recently educational TV consultant for the NEA, is in charge of the study's Washington office in the NEA building.

Five-Year Project on How We Learn

► The Carnegie Corporation has awarded $250,000 to Stanford University for research into how we learn. A five-year project will concentrate especially on the application of mathematical and statistical techniques to research in education. Among the areas to be studied are foreign language learning, elementary school mathematics teaching, the way children form concepts, methods of programing instruction, and theories of learning.

Patrick Suppes, director of the Institute for Mathematical Studies in the Social Sciences and professor of philosophy and statistics, will direct the research.

The Social Sciences Still Suffer

► On March 20 the National Science Foundation announced the award of 1,537 Graduate Fellowships in sciences, mathematics, and engineering for the academic year 1961-62. On April 2 it announced another 1,725 awards, including 1,100 Cooperative Graduate Fellowships and 625 Summer Fellowships for Graduate Teaching Assistants.

Although the NSF has indicated that there is new emphasis on the social studies in its fellowship program, the grand totals look like this: 1,840 awards in the physical sciences and certain interdisciplinary fields; 708 in the life sciences; 317 in engineering; and 66 in the social sciences.

Something Educational in Summer

► In the spring, Cincinnati, O., schools distribute to parents an inexpensive folder listing local museums, historical homes, parks, even famous trees and statues in the city, with this suggestion:

"Take your family exploring!"

Included are addresses and telephone numbers so parents can call for further information, visiting hours, etc.

Chicago Reading Research Collection

► The William S. Gray collection on research in reading at the University of Chicago now numbers over 4,500 articles and books and brings researchers from the entire nation. The university recently announced appointment of Mrs. Helen Robinson as the William S. Gray Professor of Reading Research.

Slightly Satanical

Tips for Beginning Teachers

By HOWARD A. OZMON, JR.

NO book on law says that the young lawyer should not be seen in Argyle socks. Yet knowing this seemingly trivial rule can save clients, particularly rich and staid ones.

Likewise, in education there are small bits of truth not contained in ponderous textbooks. Here are some home truths that can make the difference between success and failure in that all-important first year, and every year.

1. Don't hesitate to beat your children

Beat them, that is, to possible sources of information in your community. Don't let the children stump you by talking about places you haven't been. Don't let them bring up books you haven't read. Walk around the community, stopping often in the library.

2. Teach them to beg

In eighteenth century Europe, children were sometimes taught by professionals how to beg for food and money. Some were so successful that they and their teachers became rich. But the begging I refer to is for information. If as teachers we can instill in our pupils the desire to beg for more and more knowledge, never relying upon piled-up stores, never reaching satiety, then we have served them well.

3. Teach them to hate

We all know our pupils should hate sin, but there are other things worth hating, too. They should be taught to hate ignorance; not ignorant men, but the miasma of ignorance that blinds them. They should hate calumny, hypocrisy, envy, and selfishness. If they hate these things strongly enough, they will do something about them, which is our next point.

4. Teach them to fight

Children must learn to fight for the things they believe in. One of the great lacks in our time is moral courage. Young people are often afraid to stand up and fight. We can't teach courage as we teach mathematics, but by precept and example we can inspire pupils to take the right road, not merely the easy road.

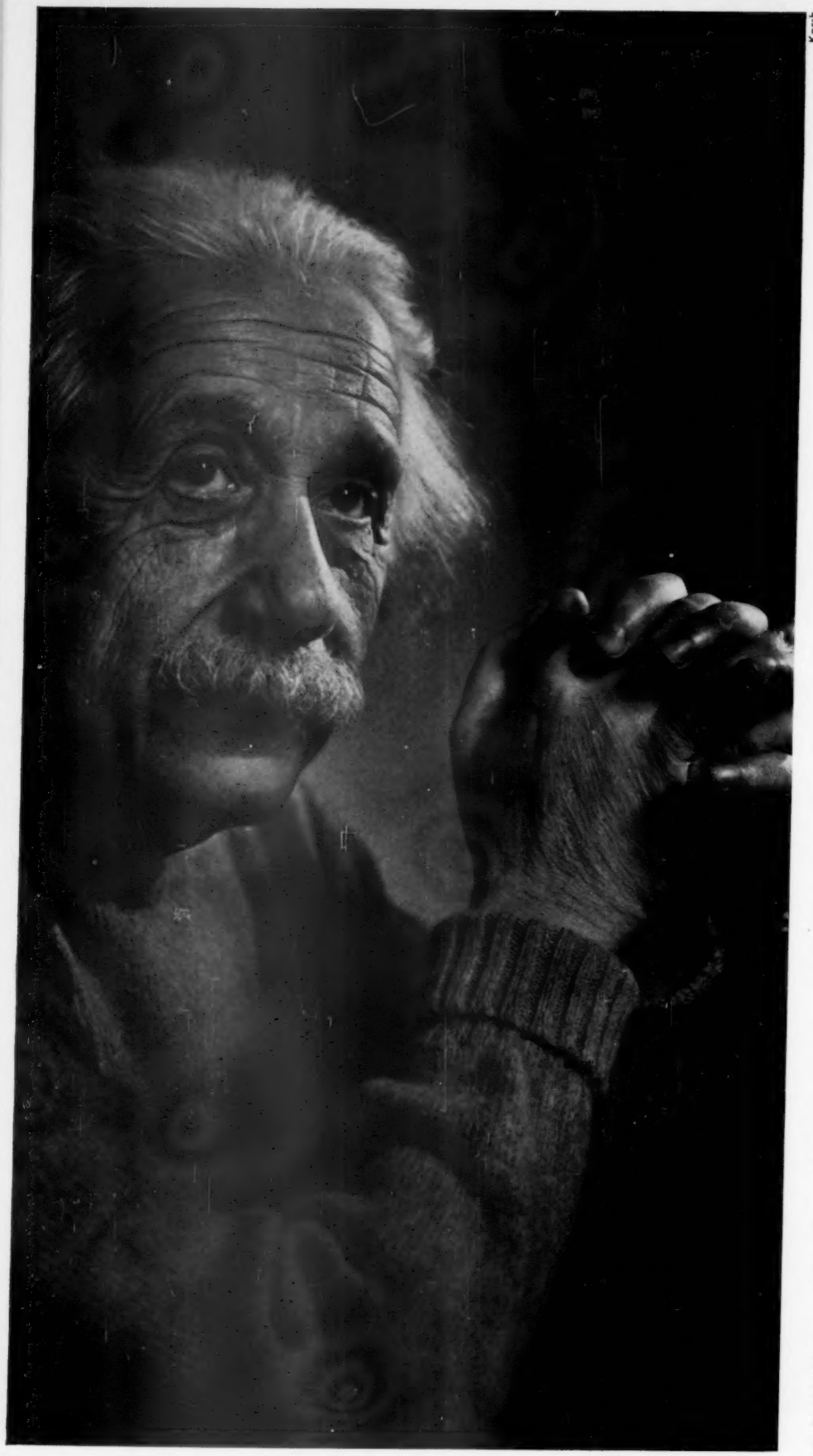
5. Teach them to talk back

One of the first rules the average child learns is that he should be seen and not heard. But a child who is not heard does not learn. He must ask questions. A teacher should impress upon children the importance of asking intelligent questions, and with relating answers to other things they have learned. Done in the right manner, talking back is fine.

6. Teach them to show off

Every child likes attention, and it should be given him. When a child is shown how to communicate his knowledge and demonstrate his talents in a pleasing way, he learns how to serve others and make friends. He becomes an asset to society.

If these rules don't fit what you learned from your textbooks, think awhile. Maybe the textbooks were wrong.



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